Yahoo Group Archive: DrakeRadio (2013-01 — 2013-06)

Yahoo Group summary: Drake Radios

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2018. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2013-01-01 through 2013-06-30

Source WARC: drakeradio.EYFOPdl.warc.gz

Source item: https://archive.org/details/yahoo-groups-2018-06-01T00-05-23Z-e1e146

Messages included in this PDF: 3332

Messages omitted as spam from this PDF: 9

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

11191. Re: [DrakeRadio] TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 00:07:19 UTC
From: scpmiller@aol.com
Topic: 855 Message: 11191

A little over a year ago, I bought a TR7 off of the auction site. The description read: radio lights up and goes dead. Sure enough, that's what it did.
I checked the usual suspects: the pin diodes - but all were good.
I couldn't find the reverse polarity protection diode and asked the group and was led right to it (it's on the back of the AF/RF/on-of switch) by several helpful people but like the pin diodes - it was fine.
Now what? Here's what I did next: the power supply card is located on the right with the radio upright and facing you. I took the covers off (top and bottom) and flipped the radio over so now the power supply card is on the left. Under where the power supply card plugs in, you can access each pin of the power supply card. Using an ohm meter I measured the resistance to ground on each pin. (BTW, the PS-7 supply is not plugged into the radio during all of this).
Sure enough one of the lines was shorted to ground - I believe it was the 10 volt line. (I am doing this from memory as my notes are out in my workshop).
It looked like the 10 volt line goes to a lot of the boards so one by one starting at the back of the radio with the IF board, I removed each board until the short circuit went away. I got to the up convertor board, pulled it out and viola - no short circuit! At first this made no sense - I saw nothing wrong with the board but then I realized that there was one part that was a perfect dull black, tear drop shaped part - I have looked at a few up convertor boards and that part didn't ring a bell. I swapped in a spare up convertor board and the radio came to life and has been fine ever since. It turned out that the dull black part was a fried Tantalum cap on the 10 volt line into the card and it took the power supply right to ground.
The TR7 (like the R390A) is a marvelous design in that each circuit area is a module of its' own and often times trouble can be isolated down to the module level by going the through a simple isolation procedure. It was time consuming but I got a chance to clean and de-Oxit each connector while I was at it. The effort was worth it - the radio is very nice cosmetically and plays very well now. I nailed the Santa Clause Special event station in Finland with it a couple of days ago as a matter of fact.

Of course your mileage may vary but my money is on this being something simple, the real question is: What module is the problem on?

Good luck.

Steve
KD2ED

In a message dated 12/31/2012 4:55:55 P.M. Eastern Standard Time, k4oah@...m writes:

Brenton -

Perhaps it blew because that is a 5A fuse, NOT a 0.5A.

Fuses 'do' fail from old age, so it's worthwhile to try a 5A fuse before digging too deeply into the
radio.

Radio Shack still has fuses, I think. It only has 14 VDC on it, so a 32V fuse would work just fine.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Brenton Crowhurst wrote:
> No lights or power.
>
> Greetings Drake friends, and Happy up - coming New Year to one and all.
>
> Recently I'd complained about an output power drop on 17m experienced under high SWR conditions.
>
> I had some great ideas, as always, from several of you. I'd only used the rig a couple of times since the problem, so hadn't done anything to the rig. Only operated it with care to ensure a low SWR.
>
> This may be a separate issue, or a progression of the same problem?
>
> The radio was dead, no display, no noise, though turning it on caused a familiar "thunk" sound at the power supply -- signs of life in the PS?
>
> Anywho, I went into the radio, finding the 250v .5A fuse blown. The position is, looking "into the rig" from the front, right behind the Drake logo.
>
> I replaced the fues with all I had, 250v, 1A, and switching the radio on again, the lights came on for a half a second, and it went dead again.
>
> I assume the fuse blew, but I dropped it into the radio, and haven't been able to reach it.
>
> Any ideas on what's wrong are appreciated.
>
> With Thanks,
>
> Brenton Crowhurst, VE6IE
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11192. Re: [DrakeRadio] TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 02:12:47 UTC
From: Brenton Crowhurst
Topic: 855 Message: 11192

My thanks to Jim, Steve and Garey for jumping in here. I thought, when I saw your responses, that I must have mis-read the values on that first fuse that blew, but I found it in the shack garbage, and sure 'nuff, it's as I said.

I'll go hunting for a 5A fuse . . . well, not tomorrow.

And I'll also try and extract the one I dropped to see if that's actually blown.

I'll report back so you know what's happened.

Again, my thanks and a 73 New Years to you. And all on the list, of course. A great resource this is!

Brenton Crowhurst, VE6IE

On 2012-12-31, at 5:07 PM, scpmiller@... wrote:

> A little over a year ago, I bought a TR7 off of the auction site. The
> description read: radio lights up and goes dead. Sure enough, that's what it
> did.
> I checked the usual suspects: the pin diodes - but all were good.
> I couldn't find the reverse polarity protection diode and asked the group
> and was led right to it (it's on the back of the AF/RF/on-of switch) by
> several helpful people but like the pin diodes - it was fine.
> Now what? Here's what I did next: the power supply card is located on the
> right with the radio upright and facing you. I took the covers off (top
> and bottom) and flipped the radio over so now the power supply card is on
> the left. Under where the power supply card plugs in, you can access each
> pin of the power supply card. Using an ohm meter I measured the resistance
> to ground on each pin. (BTW, the PS-7 supply is not plugged into the radio
> during all of this).
> Sure enough one of the lines was shorted to ground - I believe it was the
> 10 volt line. (I am doing this from memory as my notes are out in my
> workshop).
> It looked like the 10 volt line goes to a lot of the boards so one by one
> starting at the back of the radio with the IF board, I removed each board
> until the short circuit went away. I got to the up convertor board, pulled
> it out and viola - no short circuit! At first this made no sense - I saw
> nothing wrong with the board but then I realized that there was one part that
> was a perfect dull black, tear drop shaped part - I have looked at a few
> up convertor boards and that part didn't ring a bell. I swapped in a spare
> up convertor board and the radio came to life and has been fine ever
> since. It turned out that the dull black part was a fried Tantalum cap on the
> 10 volt line into the card and it took the power supply right to ground.
> The TR7 (like the R390A) is a marvelous design in that each circuit area is
> a module of its' own and often times trouble can be isolated down to the
> module level by going the through a simple isolation procedure. It was time

> consuming but I got a chance to clean and de-Oxit each connector while I
> was at it. The effort was worth it - the radio is very nice cosmetically
> and plays very well now. I nailed the Santa Clause Special event station in
> Finland with it a couple of days ago as a matter of fact.
>
> Of course your mileage may vary but my money is on this being something
> simple, the real question is: What module is the problem on?
>
> Good luck.
>
> Steve
> KD2ED
>
> In a message dated 12/31/2012 4:55:55 P.M. Eastern Standard Time,
> k4oah@... writes:
>
> Brenton -
>
> Perhaps it blew because that is a 5A fuse, NOT a 0.5A.
>
> Fuses 'do' fail from old age, so it's worthwhile to try a 5A fuse before
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> radio.
>
> Radio Shack still has fuses, I think. It only has 14 VDC on it, so a 32V
> fuse would work just fine.
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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> > Anywho, I went into the radio, finding the 250v .5A fuse blown. The
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> logo.
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> > I replaced the fues with all I had, 250v, 1A, and switching the radio on
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> > Yahoo! Groups Links
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11193. Re: [DrakeRadio] TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 02:19:51 UTC
From: Brenton Crowhurst
Topic: 855 Message: 11193

Just to confirm, the loose fuse was recovered from the radio (1A, 250V) and it's blown.

On 2012-12-31, at 7:12 PM, Brenton Crowhurst wrote:

> My thanks to Jim, Steve and Garey for jumping in here. I thought, when I saw your responses, that I must have mis-read the values on that first fuse that blew, but I found it in the shack garbage, and sure 'nuff, it's as I said.
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>>> Yahoo! Groups Links
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11194. Possible Tube Source

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 15:37:16 UTC
From: w7up
Topic: 11194 Message: 11194

The owner of Electron Addict LLC told me that he has a large stock of NOS tubes.

The URL is http://www.electronaddict.com/wrdprss/?page_id=2

I have no connection with this business.

73,
Dan Steinhoff - W7UP

11195. Re: [DrakeRadio] Re: New TR-4 Owner..

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 23:02:42 UTC
From: n4buq
Topic: 11081 Message: 11195

Due to moving, I need to divest myself of my electronic hobby equipment. Click the following link to see the list and pictures. Click on any thumbnail for a hires version of the image. There are a couple of Drake radios at the top of the list.

I will be listing more items and will send an update when I get those added to the list.

http://www.knology.net/~TheLanding/ForSale/ForSale.html
<http://www.knology.net/%7ETheLanding/ForSale/ForSale.html>

Thanks,
Barry - N4BUQ

[Non-text portions of this message have been removed]

11196. Radios and Test Equipment For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 23:06:01 UTC
From: n4buq
Topic: 11081 Message: 11196

Due to moving, I need to divest myself of my electronic hobby
equipment. Click the following link to see the list and pictures.
Click on any thumbnail for a hires version of the image.

I will be listing more items and will send an update when I get those
added to the list.

http://www.knology.net/~TheLanding/ForSale/ForSale.html
<http://www.knology.net/%7ETheLanding/ForSale/ForSale.html>

Thanks,
Barry - N4BUQ

Sorry for the repost but the subject line was incorrect for the first post.

[Non-text portions of this message have been removed]

11197. C-line shifting frequency?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-01 23:46:57 UTC
From: w6mqi
Topic: 11197 Message: 11197

Having some interesting issues with a c-line one problem is while listening to the receiver the RF gain or sensitivity will drop by half as though a nearby station has swamped the AGC. I can bring the RCVR back to full gain by cycling the transceive switch on the T4XC from SEPERATE to RCVR or TX position, sometimes this won't work though. I'm not sure if it's the RF gain or AGC or a dirty switch I've cleaned every switch real well with no change.
Problem two: With the R4C passband knob set to LSB, filters set to SSB, and the T4XC set to LSB I then switch from SSB to xCW on the T4XC the R4C will shift up in frequency by 200-300Hz then switching back to SSB from xCW R4C shifts back down 200-300Hz. Also while listening to the R4C by it's self with T4XC power off I then turn the power on to the T4XC, R4C will shift up in frequency confused? I know I' am
Other then these two issues the c-line works fine the R4C has all filters, and every Sherwood mod available, but you know what I still like the sound of my R4B better then the R4C the R4C seems a bit pinched or lack's the audio range of the R4B to my ears anyway.

73,Dave

11198. The trusty, crusty T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 00:13:38 UTC
From: Steve Wedge
Topic: 11198 Message: 11198

My auction bargain came to life today!

I checked all the tubes on my TV-10 military tester and all were fine. While they were out of the rig, I took a q-tip with some Cramolin on it to all tube pins. I fired it up with my station AC-4 and R-4B and cycled the band switch a bunch of times. The VOX and antivox controls also needed some adjustment, but I'm happy to say I can get 150W out on 80 - 20, about 70W on 15 and 100w on 10, so the finals are good! Looks like the neutralization is a wee bit off, so will need to do that after cleaning.

The front panel and knobs are in very good shape on this one, but the right rear chassis is quite crusty/corroded. I will need to take this one apart and wash it prior to deciding how to stop further damage to the chassis. It looks like I can save this rig from the scrap heap, though, and that's always a good thing!

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

11199. Status of Drake nets?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 01:29:52 UTC
From: wb4spt
Topic: 11199 Message: 11199

Trying for the first time to get into the 3865kHz net on Tuesday 8 ET. Is that still used? I am hearing much activity already there, but not the Drake folks. Also, is the 7238kHz net active on Sun at 3pm ET?

11200. Re: [DrakeRadio] The trusty, crusty T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 01:37:40 UTC
From: David Winfree
Topic: 11198 Message: 11200

Cramolin; that one escaped my 40 plus years of electronic work. I see its a contact cleaner made now in Switzerland; Good news on the T4, sounds like some tuning on 15m is in order.

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Tue, January 1, 2013 7:20:00 PM
Subject: [DrakeRadio] The trusty, crusty T-4XB

My auction bargain came to life today!

I checked all the tubes on my TV-10 military tester and all were fine. While they were out of the rig, I took a q-tip with some Cramolin on it to all tube pins. I fired it up with my station AC-4 and R-4B and cycled the band switch a bunch of times. The VOX and antivox controls also needed some adjustment, but I'm happy to say I can get 150W out on 80 - 20, about 70W on 15 and 100w on 10, so the finals are good! Looks like the neutralization is a wee bit off, so will need to do that after cleaning.

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Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

[Non-text portions of this message have been removed]

11201. Re: [DrakeRadio] The trusty, crusty T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 03:07:54 UTC
From: Richard Knoppow
Topic: 11198 Message: 11201

----- Original Message -----
From: "David Winfree" <davidwinfree@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, January 01, 2013 5:37 PM
Subject: Re: [DrakeRadio] The trusty, crusty T-4XB

> Cramolin; that one escaped my 40 plus years of electronic
> work. I see its a
> contact cleaner made now in Switzerland; Good news on the
> T4, sounds like some
> tuning on 15m is in order.
>
Cramolin was the Deoxit of its time. Once very common
stuff. I have no idea what was in it or why it disappeared
from the American market. Maybe toxic maybe some other
reason. I used a lot of it way back when and it worked very
well.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11202. Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 03:35:33 UTC
From: k3jls@verizon.net
Topic: 11202 Message: 11202

Hi Folks,

You might find the attached website article interesting. It describes how to interface a simple frequency counter kit (purchased on ebay) to your Drake twins:

http://www.k3jls.net/twins.html

I have no financial interest in this product, but I wrote it up just for the heck of it. I'm still working on some minor issues.

Please drop me a line off-net if you'd like to discuss.

73's and Happy New year All!

Joe - K3JLS

11204. Re: [DrakeRadio] The trusty, crusty T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 13:58:00 UTC
From: Steve Wedge
Topic: 11198 Message: 11204

I have a small bottle of the stuff, which has so far lasted me 20 years :)

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jan 1, 2013, at 10:07 PM, "Richard Knoppow" <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "David Winfree" <davidwinfree@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, January 01, 2013 5:37 PM
> Subject: Re: [DrakeRadio] The trusty, crusty T-4XB
>
> > Cramolin; that one escaped my 40 plus years of electronic
> > work. I see its a
> > contact cleaner made now in Switzerland; Good news on the
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> well.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

[Non-text portions of this message have been removed]

11205. Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 16:24:11 UTC
From: Mike
Topic: 11205 Message: 11205

Hay gang.

Any hints at re-whiteing (?) the knobs from a R series receiver?

They are in good shape but the line pointers are quite yellow.

Bleach? Repaint?

Soap and water didn't do much

Mike wb8vge

Sent from my iPhone

11206. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 16:32:41 UTC
From: Garey Barrell
Topic: 11205 Message: 11206

Hi Mike -

Lotsa options! In no particular order.

White-out correction fluid

White artists crayon

Lacquer stick (Actually the product MADE for this task!)

Testor's model Paint

All are applied, then the surface of the knob is wiped leaving only the line. The original can be
scrapedout with a toothpick or 'orange stick' etc.

Probably others I've missed.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mike wrote:
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11207. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 16:40:35 UTC
From: Paul Christensen
Topic: 11205 Message: 11207

I've been using a Liquid Paper product called a "Correction Pen." It applies the white-out from the ball-point tip right into the engraved line. The pen is squeezed as the ball-point travels down the line. The edges dry in less than a half minute. Then, wipe the waste away for a perfectly edged line. The white out liquid seems to keep it's brilliance with aging and heat.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 02, 2013 11:32 AM
Subject: Re: [DrakeRadio] Knob white lines

Hi Mike -

Lotsa options! In no particular order.

White-out correction fluid

White artists crayon

Lacquer stick (Actually the product MADE for this task!)

Testor's model Paint

All are applied, then the surface of the knob is wiped leaving only the line. The original can be
scrapedout with a toothpick or 'orange stick' etc.

Probably others I've missed.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mike wrote:
> Hay gang.
>
> Any hints at re-whiteing (?) the knobs from a R series receiver?
>
> They are in good shape but the line pointers are quite yellow.
>
> Bleach? Repaint?
>

> Soap and water didn't do much
>
> Mike wb8vge
>
> Sent from my iPhone
>
>

[Non-text portions of this message have been removed]

11208. Re: Drake TR3/4/T4 Plate Meter needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 17:21:18 UTC
From: kb0omq
Topic: 11114 Message: 11208

--- In DrakeRadio@yahoogroups.com, "ROBERT P" <bob.preston73@...> wrote:
>
>
>
> Hi Robert please mail me the details I have tried three times to mail you at kb0omq@... but it just bounces back thanks again Bob G1EGL
>
> --- In DrakeRadio@yahoogroups.com, "kb0omq" <kb0omq@> wrote:
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, "ROBERT P" <bob.preston73@> wrote:
> > >
> > > Hi all just in the middle of my TR3 rebuild but the Plate meter is shot big time has anybody on the forum got one that they can spare or know of a source for replacements ? any help would be great thank you Bob G1EGL.
> > >
> > Bob, I have a Plate meter/S meter. If your interested in it you can email me at kb0omq@ Yes it is from a Drake TR-3. 73 from Robert.
> >
>Hi,Bob I haven't checked my email for a few days due to the Holliday. I can't understand why I didn't get your email. I will attempt to email you today as soon as I finish typing this. Bob I have other parts and pieces for the Drake TR-3 I will give you list. 73 from Robert KB0OMQ.

11212. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 17:59:59 UTC
From: Dan Galligan
Topic: 11205 Message: 11212

Mike,
Clorox puts out a Bleach "pen" that I use in the very narrow grout in tile, above my bathtub. You might give that a try, first.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

In memory of Spc. Daniel L. Carlson U.S.A., KIA 9 November, 2012
He was a dedicated soldier, and Patriot.
From a very grateful American.
Rest in Peace, Danny. You will always be missed.

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On Jan 2, 2013, at 8:24 AM, Mike <prosolar@...> wrote:

Hay gang.

Any hints at re-whiteing (?) the knobs from a R series receiver?

They are in good shape but the line pointers are quite yellow.

Bleach? Repaint?

Soap and water didn't do much

Mike wb8vge

Sent from my iPhone

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11213. Looking for a Drake B-Line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 18:32:33 UTC
From: KG0MN
Topic: 11213 Message: 11213

If anyone has a B-line they no longer need please let me know the condition, crystals installed and Price.

Thanks
KG0MN - Kevin

11216. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-02 20:49:12 UTC
From: VE3AX/7
Topic: 11205 Message: 11216

I use white Acrylic artist’s paint in a tube, any brand, available any good hobby or arts supply store.

After cleaning the knob with any home cleaner and drying, I overfill the groove with the paint and wipe excess with a damp paper towel, pressing down a bit to get a slight indentation. Not necessary to remove old paint.

73

Peter
VE3AX/7

From: Dan Galligan
Sent: Wednesday, January 02, 2013 9:59 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Knob white lines

Mike,
Clorox puts out a Bleach "pen" that I use in the very narrow grout in tile, above my bathtub. You might give that a try, first.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

In memory of Spc. Daniel L. Carlson U.S.A., KIA 9 November, 2012
He was a dedicated soldier, and Patriot.
From a very grateful American.
Rest in Peace, Danny. You will always be missed.

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On Jan 2, 2013, at 8:24 AM, Mike <mailto:prosolar%40gmail.com> wrote:

Hay gang.

Any hints at re-whiteing (?) the knobs from a R series receiver?

They are in good shape but the line pointers are quite yellow.

Bleach? Repaint?

Soap and water didn't do much

Mike wb8vge

Sent from my iPhone

Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11219. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 01:14:00 UTC
From: Richard Knoppow
Topic: 11205 Message: 11219

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, January 02, 2013 4:55 PM
Subject: Re: [DrakeRadio] Knob white lines

> Wow, never thought about using Simichrome on plastic. I
> know it works great on silver and copper, We used to use
> it on our badges, at the PD I retired from. I bet it would
> be great on plastic, but I sure never thought about that.
> For that matter, DuPont Polishing Compound should work
> really well, too.
>
> 73,
> Dan
> W3RXO/W6

I can confirm Dupont No.7 rubbing compound works fine
on plastic. I have Simichrome but can't remember if I've
tried it on plastic. Its a paste with jeweler's rouge in it.
The best mild abrasive is toothpaste. Its worth trying
before using anything stronger.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11220. counter for drake

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 01:59:17 UTC
From: lcbs@sbcglobal.net
Topic: 11220 Message: 11220

N3ZI makes a inexpensive counter that can be connected to INJ and read freq directly.
Larry K9LWI

11221. Re: [DrakeRadio] Knob white lines

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 02:56:39 UTC
From: Garey Barrell
Topic: 11205 Message: 11221

Brasso too, for that matter.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dan Galligan wrote:
> Wow, never thought about using Simichrome on plastic. I know it works great on silver and copper, We used to use it on our badges, at the PD I retired from. I bet it would be great on plastic, but I sure never thought about that. For that matter, DuPont Polishing Compound should work really well, too.
>

11222. Re: counter for drake

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 18:01:17 UTC
From: k3jls@verizon.net
Topic: 11220 Message: 11222

Hi Larry,

Thanks for the comment. Yes, I did see Larry's counter. It's more versatile as it has the ability to store more than one frequency offset, but I like this one because it has the larger, seven segment displays (easier on the eyes) and comes with a 'matching' enclosure - nothing else to buy or fabricate.

It's perfect for my purposes.

73's and happy New Year - Joe - K3JLS

--- In DrakeRadio@yahoogroups.com, "lcbs@..." wrote:
>
> N3ZI makes a inexpensive counter that can be connected to INJ and read freq directly.
> Larry K9LWI
>

11223. 2B filter cap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 21:21:30 UTC
From: Paul Kraemer
Topic: 11223 Message: 11223

I have a Unique Radio Parts LLC replacement for the can lytic used in the 2B power supply.

This NOT a can but four radial lead lytics mounted on a circuit board with lugs so it is a drop in replacement for the original can

Item is new, never used. Comes with replacements for the two resistors on the original cap as well to simplify installation

Asking $15 which includes postage in USA

Paul K0UYA

11224. Re: [DrakeRadio] 2B filter cap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-03 22:42:16 UTC
From: Wes Bolin
Topic: 11223 Message: 11224

Hi paul
Please contact me off Group:
k5apl at yahoo dot com
Thanks
Wes

From: Paul Kraemer <elespe@...>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, January 3, 2013 3:21 PM
Subject: [DrakeRadio] 2B filter cap

I have a Unique Radio Parts LLC replacement for the can lytic used in the 2B power supply.

This NOT a can but four radial lead lytics mounted on a circuit board with lugs so it is a drop in replacement for the original can

Item is new, never used. Comes with replacements for the two resistors on the original cap as well to simplify installation

Asking $15 which includes postage in USA

Paul K0UYA

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11226. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-04 14:16:50 UTC
From: Garey Barrell
Topic: 11202 Message: 11226

Goran -

Please explain to me why a digital display is 'a must' for low band DXing. I can easily set ANY of
the Drake 4 Series radios to within ~100 Hz of a specified frequency using only the Calibrator and
original dial. That is certainly close enough to 'find' any specified station, perhaps with a 600
Hz tone rather than a 400 Hz, or a slightly garbled SSB signal.

I have no problem with those who prefer digital dials, and/or who want to modify their own radios, I
just don't understand the need to make such drastic modifications to an existing radio. It's
certainly much easier and cheaper to build a radio with a digital dial, one of the toughest things
to design is a good variable oscillator that is linear across a range.

Just wondering.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

sm7dlk wrote:
> My view on digital display:
>
> For serious lowband DX-ing a digital display is a must and if you dont build your own there are many alternatives. I have two R-4C, both with digital display. One built in and one external.
>
> The first I did was the FCC-1 from Norcal (no longer available). This was realy a good kit and it fit perfect inside the R-4C behind the front panel. The display in the FCC-1 was without backlight. A display with backlight is only sligtly thicker, but make sure you pick one with backlight otherwise you will regret it later on.
>
> The second I did was from this site (http://www.hamradio.in/circuits/freq_counter_lcd.php). The PCB-layout and software is all in there. Easy to build.
>
> Dont forget to pay attention to the input sensitivity. Drake`s Injection signal tend to be lower at higher frequency.

>
> As said, using the Drake for serious DX-ing, digital is a must. But for ordinary "cruising" on the band I should think twice before adding it.
>
> 73
> Goran SM7DLK
>
>

11227. Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-04 18:27:26 UTC
From: k3jls@verizon.net
Topic: 11202 Message: 11227

Hello again,

I would agree that a properly calibrated analog Drake dial is very accurate. However, at least in my R4A, the dial is not perfectly linear and does require recalibration at each 100 khz point.

By contrast, the digital dial is linear throughout the tuning range, is very accurate (after the receiver has warmed up a bit), is much easier to see, and does not require any mods to the R4.

Ralph has posted another batch of frequency counter kits on ebay if anyone is interested. Here's the link:

http://www.ebay.com/itm/Frequency-Counter-Kit-6-Digit-50-Mhz-Built-In-Pre-Amp-With-Case-and-Lens-/140902707781?pt=US_Ham_Radio_Transmitters&hash=item20ce74b245

73's - Joe

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Goran -
>
> Please explain to me why a digital display is 'a must' for low band DXing. I can easily set ANY of
> the Drake 4 Series radios to within ~100 Hz of a specified frequency using only the Calibrator and
> original dial. That is certainly close enough to 'find' any specified station, perhaps with a 600
> Hz tone rather than a 400 Hz, or a slightly garbled SSB signal.
>
> I have no problem with those who prefer digital dials, and/or who want to modify their own radios, I
> just don't understand the need to make such drastic modifications to an existing radio. It's
> certainly much easier and cheaper to build a radio with a digital dial, one of the toughest things
> to design is a good variable oscillator that is linear across a range.
>
> Just wondering.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>

>
> sm7dlk wrote:
> > My view on digital display:
> >
> > For serious lowband DX-ing a digital display is a must and if you dont build your own there are many alternatives. I have two R-4C, both with digital display. One built in and one external.
> >
> > The first I did was the FCC-1 from Norcal (no longer available). This was realy a good kit and it fit perfect inside the R-4C behind the front panel. The display in the FCC-1 was without backlight. A display with backlight is only sligtly thicker, but make sure you pick one with backlight otherwise you will regret it later on.
> >
> > The second I did was from this site (http://www.hamradio.in/circuits/freq_counter_lcd.php). The PCB-layout and software is all in there. Easy to build.
> >
> > Dont forget to pay attention to the input sensitivity. Drake`s Injection signal tend to be lower at higher frequency.
> >
> > As said, using the Drake for serious DX-ing, digital is a must. But for ordinary "cruising" on the band I should think twice before adding it.
> >
> > 73
> > Goran SM7DLK
> >
> >
>

11228. aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:19:17 UTC
From: William Houghton
Topic: 11228 Message: 11228

All,

Does anyone know the failure mechanism(s) of electrolytic capacitors? I have heard/read that the electrolyte dies out over time. We all know to replace them in our old tube rigs. Does this happen only while voltage is applied? Does this happen to NOS caps that have never been used? I have seen several NOS caps sold on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer is simply ignorant.

Also, I have never heard of anyone replacing electrolyitc caps in solid state gear even though a lot of early SS gear is now 35+ years old.

73,

Bill

[Non-text portions of this message have been removed]

11229. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:35:37 UTC
From: amfone
Topic: 11228 Message: 11229

Yes NOS will fail over time even if not used. The shelf life of an electrolytic is about 15 years they start to age as soon as they are made. This is much the same as coax cable. You can buy some " still in the box and not used" but coax starts the aging process as soon as its made.

Tim
WB8UHZ

From: William Houghton <rdrbill@pacbell.net>
To: DrakeRadio@yahoogroups.com
Cc: heathkit group <HeathKit-Radios@yahoogroups.com>
Sent: Friday, January 4, 2013 9:19 PM
Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

All,

Does anyone know the failure mechanism(s) of electrolytic capacitors? I have heard/read that the electrolyte dies out over time. We all know to replace them in our old tube rigs. Does this happen only while voltage is applied? Does this happen to NOS caps that have never been used? I have seen several NOS caps sold on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer is simply ignorant.

Also, I have never heard of anyone replacing electrolyitc caps in solid state gear even though a lot of early SS gear is now 35+ years old.

73,

Bill

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11230. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:39:24 UTC
From: amfone
Topic: 11228 Message: 11230

Yes the aging process starts immediately. NOS caps are aged. Electrolytics have about a 15 year shelf life even if not used. This is not to say they will not function but they have aged. This is similar to coax cable, you can buy new never used cable that is 10 years old but all it means is that it is 10 years old and aged, as coax starts the aging process as soon as its made.

New gear frequently has electrolytic's fail and they are replaced all the time. New components can fail too but not as likely.

73
TIM
WB8UHZ

From: William Houghton <rdrbill@pacbell.net>
To: DrakeRadio@yahoogroups.com
Cc: heathkit group <HeathKit-Radios@yahoogroups.com>
Sent: Friday, January 4, 2013 9:19 PM
Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

All,

Does anyone know the failure mechanism(s) of electrolytic capacitors? I have heard/read that the electrolyte dies out over time. We all know to replace them in our old tube rigs. Does this happen only while voltage is applied? Does this happen to NOS caps that have never been used? I have seen several NOS caps sold on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer is simply ignorant.

Also, I have never heard of anyone replacing electrolyitc caps in solid state gear even though a lot of early SS gear is now 35+ years old.

73,

Bill

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11231. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:44:41 UTC
From: Paul Kraemer
Topic: 11228 Message: 11231

I have replaced numerous electrolytics in solid state equipment over the
past 50 years servicing lab and industrial control equipment. The failure is
generally not a shorted capacitor but an open or decrease in value so the
failure is not as obvious but it is failed. Gain and response usually
suffer. The unit keeps "working" but not up to spec.
Paul K0UYA
----- Original Message -----
From: "William Houghton" <rdrbill@...>
To: <DrakeRadio@yahoogroups.com>
Cc: "heathkit group" <HeathKit-Radios@yahoogroups.com>
Sent: Friday, January 04, 2013 8:19 PM
Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

> All,
>
> Does anyone know the failure mechanism(s) of electrolytic capacitors? I
> have
> heard/read that the electrolyte dies out over time. We all know to replace
> them
> in our old tube rigs. Does this happen only while voltage is applied? Does
> this
> happen to NOS caps that have never been used? I have seen several NOS caps
> sold
> on ebay and I can't imagine why anyone would buy 30 yr old caps unless the
> buyer
> is simply ignorant.
>
> Also, I have never heard of anyone replacing electrolyitc caps in solid
> state
> gear even though a lot of early SS gear is now 35+ years old.
>
> 73,
>
> Bill
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

11232. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:51:03 UTC
From: Don Cunningham
Topic: 11228 Message: 11232

Bill,

Way back, before it would have been even 10 years old, I had to replace ALL the electrolytic capacitors on an Icom IC-751, and that appears to be across the models of many of the Icoms of the late 70's to mid 80's at least. The display would come on after a LONG wait, or not at all. Radio still worked just fine, you just didn't know where you were!! At first they only recommended certain caps, then later said just all of them to keep from going back in there so much.

I suspect we will see electrolytic and tantalum caps begin going bad on the TR7/R7 series as well. Just my opinion on that though, but they are over that 15 year level. I have read many places that new computer LCD flat screen monitors that fail, even new failure, will be fixed by replacing bad electrolytics.

I buy NO NOS electrolytic or tantalum caps. Most are as suspect as the one in your rig, and the newer ones have better specs!
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11233. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:59:09 UTC
From: Charles Ring
Topic: 11228 Message: 11233

On 1/4/2013 2135, amfone wrote:
>
> Yes NOS will fail over time even if not used. The shelf life of an
> electrolytic is about 15 years they start to age as soon as they are
> made. This is much the same as coax cable. You can buy some " still in
> the box and not used" but coax starts the aging process as soon as its
> made.
>
> Tim
> WB8UHZ
> .
>
>
>

In 1968 I bought ten feet of "Columbia Super Flex" RG-8/U coax, cut it into 3 pieces and put connectors on it. All 3 pieces are still in use now and working good as new. Replaced the connectors on one piece a year ago.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

11234. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 02:59:02 UTC
From: Don Cunningham
Topic: 11228 Message: 11234

Bill,

I need to correct my last. I replaced all the capacitors on the display board only on the 751, not the whole rig, as my mail would have suggested.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11235. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 03:10:01 UTC
From: Jim Shorney
Topic: 11228 Message: 11235

On Fri, 4 Jan 2013 18:19:17 -0800 (PST), William Houghton wrote:

>Also, I have never heard of anyone replacing electrolyitc caps in solid state
>gear even though a lot of early SS gear is now 35+ years old.

You haven't been listening. ;)

Heat is an enemy of electrolytics. They should be replaced with parts rated for 105C temperature whenever possible. Power supply circuits fare the worst, especially switch mode power supplies where the caps have to handle hight currents at high frequencies.. Electrolytics on the TR-7 DC-DC converter board are on my "always replace" list, for example. Got a dead computer power supply or LCD monitor? Re-cap the power supply. The bad ones are usually easy to spot, they are bulged/split/leaking. In a semi-operational power supply or circuit, failing caps are often warm or hot to the touch (but be careful, the can will often have voltage on it).

Failing decoupling caps can cause motorboating or excess noise in audio circuits and strange behavior in other circuits. Audio performance can degrade gradually as coupling and frequency response shaping caps fail, and is often not even noticed by the owner.

Electrolytics are evil hellspawn, but they are necessary. But that's just my opinion. Maybe someday I'll tell you what I REALLY think.

73

-Jim (still trying to get over this shyness problem....)
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11236. Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 12:04:38 UTC
From: jhj43@btinternet.com
Topic: 11236 Message: 11236

Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.

11237. Cinch Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 12:07:30 UTC
From: jhj43@btinternet.com
Topic: 11237 Message: 11237

The heading for my previous post should have been Cinch not Cincl, a typographical error.
Hi.

11238. Re: [DrakeRadio] Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 12:09:43 UTC
From: Ernie Gray
Topic: 11236 Message: 11238

Not familiar with R4 plugs. What does it look like? I'll check

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: "jhj43@..." <jhj43@...>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, January 5, 2013 7:04 AM
Subject: [DrakeRadio] Cincl Plugs

Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.

[Non-text portions of this message have been removed]

11239. Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 14:10:49 UTC
From: sm7dlk
Topic: 11202 Message: 11239

Gary,

I agree with you that R-4C is accurate when calibrated.
But one advantage with the digital display is that I no longer need to use the Calibration-switch. What I see is what I always get. This is also a great feature when switching between Bands. No need to re-calibrate at band switch or when moving across the entire band.

I always use narrow filters and on very weak sigs at noise-level sometimes the 10Hz resolution is also good to know. On 160 m the sigs can be completely gone for minutes and if I know the digit I know exactly where to listen.

Perhaps this is also personal. It's a matter of taste. I have nothing against an analogue display. I grew up with it. But I feel a "number" is easier to handle when part of the brain is linked to the computer screen.

I modify my R-4C because it satisfy me and as a result I have a much better RX compared to my FT-1000

Goran SM7DLK

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Goran -
>
> Please explain to me why a digital display is 'a must' for low band DXing. I can easily set ANY of
> the Drake 4 Series radios to within ~100 Hz of a specified frequency using only the Calibrator and
> original dial. That is certainly close enough to 'find' any specified station, perhaps with a 600
> Hz tone rather than a 400 Hz, or a slightly garbled SSB signal.
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> I have no problem with those who prefer digital dials, and/or who want to modify their own radios, I
> just don't understand the need to make such drastic modifications to an existing radio. It's
> certainly much easier and cheaper to build a radio with a digital dial, one of the toughest things
> to design is a good variable oscillator that is linear across a range.
>
> Just wondering.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> > Dont forget to pay attention to the input sensitivity. Drake`s Injection signal tend to be lower at higher frequency.
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> > As said, using the Drake for serious DX-ing, digital is a must. But for ordinary "cruising" on the band I should think twice before adding it.
> >
> > 73
> > Goran SM7DLK
> >
> >
>

11240. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 15:01:59 UTC
From: David Winfree
Topic: 11228 Message: 11240

Does anyone here know the aging mechanism in RF Coax? I have had to replace 42 year old RG59 recently in my Dad's attic, that had become lossy. Seems to me that solid polyethylene and copper wire are very stable, especially if away from UV (sunlight) and sulphur compounds. But, something clearly is working on coax over the years to cause loss. I'm going to suggest it is all dielectric loss. One easy test is to strip out some of the center insulation from suspect coax, put it in a home microwave with a cup of water in there to prevent oven damage. Lossy plastic will heat up.

From: amfone <amfone20000@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Cc: heathkit group <HeathKit-Radios@yahoogroups.com>
Sent: Fri, January 4, 2013 9:55:49 PM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yes the aging process starts immediately. NOS caps are aged. Electrolytics have about a 15 year shelf life even if not used. This is not to say they will not function but they have aged. This is similar to coax cable, you can buy new never used cable that is 10 years old but all it means is that it is 10 years old and aged, as coax starts the aging process as soon as its made.

New gear frequently has electrolytic's fail and they are replaced all the time. New components can fail too but not as likely.

73
TIM
WB8UHZ

From: William Houghton rdrbill@...>
To: DrakeRadio@yahoogroups.com
Cc: heathkit group HeathKit-Radios@yahoogroups.com>
Sent: Friday, January 4, 2013 9:19 PM
Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

All,

Does anyone know the failure mechanism(s) of electrolytic capacitors? I have heard/read that the electrolyte dies out over time. We all know to replace them in our old tube rigs. Does this happen only while voltage is applied? Does this happen to NOS caps that have never been used? I have seen several NOS caps sold on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer

is simply ignorant.

Also, I have never heard of anyone replacing electrolyitc caps in solid state gear even though a lot of early SS gear is now 35+ years old.

73,

Bill

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11241. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:03:55 UTC
From: Garey Barrell
Topic: 11202 Message: 11241

Goran -

Ok, valid points. I'm not a contester, so rarely have to know exact frequency. I 'grew up' with NO
frequency display, as the entire Novice amateur band was a little over 1/8" wide on a metal dial
plate!! :-)

I must admit I still get a laugh at the guys sitting in a round table arguing over who is 10 Hz 'off
frequency' when NONE of them is actually where their 'digital dials' tells them they are! :-)

Enjoy your Drakes, any way you want them!

Happy New Year.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

sm7dlk wrote:
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"cruising" on the band I should think twice before adding it.
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>>> 73
>>> Goran SM7DLK
>>>
>>>

11242. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:04:24 UTC
From: amfone
Topic: 11228 Message: 11242

Yep it can happen Charles. I went against my better judgment and purchased 50 feet of used cable at a swap in August. About three weeks ago I wanted to test it. I did a simple test, transmitter at 100 watts, cable under test that I purchased and a dummy load from Heath Kit. I was getting about 10 watts reflected as I recall. The cable appearing good was no longer 50 ohms. Like I said it will start aging even if it looks good. On good visual check is to peal back the outer case and look at the braid, if its tarnished its not good cable. Win some lose some.

73 tim
WB8UHZ

From: Charles Ring <w3nu@...>
To: DrakeRadio@yahoogroups.com
Cc: amfone <amfone20000@...>
Sent: Friday, January 4, 2013 9:59 PM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

On 1/4/2013 2135, amfone wrote:
>
> Yes NOS will fail over time even if not used. The shelf life of an
> electrolytic is about 15 years they start to age as soon as they are
> made. This is much the same as coax cable. You can buy some " still in
> the box and not used" but coax starts the aging process as soon as its
> made.
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> Tim
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>
>
>

In 1968 I bought ten feet of "Columbia Super Flex" RG-8/U coax, cut it
into 3 pieces and put connectors on it. All 3 pieces are still in use
now and working good as new. Replaced the connectors on one piece a year
ago.

--
Charles Ring W3NU

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[Non-text portions of this message have been removed]

11243. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:08:34 UTC
From: Garey Barrell
Topic: 11228 Message: 11243

David -

I believe one failure mode is migration of the carbon in the black jacket into the polyinsulator.

Another would be moisture, which is almost impossible to keep out.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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David Winfree wrote:
> Does anyone here know the aging mechanism in RF Coax? I have had to replace 42
> year old RG59 recently in my Dad's attic, that had become lossy. Seems to me
> that solid polyethylene and copper wire are very stable, especially if away from
> UV (sunlight) and sulphur compounds. But, something clearly is working on coax
> over the years to cause loss. I'm going to suggest it is all dielectric loss.
> One easy test is to strip out some of the center insulation from suspect coax,
> put it in a home microwave with a cup of water in there to prevent oven damage.
> Lossy plastic will heat up.
>
>
>
>
> _

11244. RE: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:19:14 UTC
From: Bob Spooner
Topic: 11228 Message: 11244

Dave and all,

If the coax was in the attic, the high temperatures during summer probably accelerated the aging process.

73,

Bob AD3K

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of David Winfree
Sent: Saturday, January 05, 2013 10:02 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Does anyone here know the aging mechanism in RF Coax? I have had to replace 42 year old RG59 recently in my Dad's attic, that had become lossy. Seems to me that solid polyethylene and copper wire are very stable, especially if away from UV (sunlight) and sulphur compounds. But, something clearly is working on coax over the years to cause loss. I'm going to suggest it is all dielectric loss. One easy test is to strip out some of the center insulation from suspect coax, put it in a home microwave with a cup of water in there to prevent oven damage. Lossy plastic will heat up.

From: amfone amfone20000@yahoo.com <mailto:amfone20000%40yahoo.com> >
To: "DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> " DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Cc: heathkit group HeathKit-Radios@yahoogroups.com <mailto:HeathKit-Radios%40yahoogroups.com> >
Sent: Fri, January 4, 2013 9:55:49 PM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yes the aging process starts immediately. NOS caps are aged. Electrolytics have about a 15 year shelf life even if not used. This is not to say they will not function but they have aged. This is similar to coax cable, you can buy new never used cable that is 10 years old but all it means is that it is 10 years old and aged, as coax starts the aging process as soon as its made.

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TIM
WB8UHZ

_____
From: William Houghton rdrbill@... <mailto:rdrbill%40pacbell.net> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Cc: heathkit group HeathKit-Radios@yahoogroups.com
<mailto:HeathKit-Radios%40yahoogroups.com> >
Sent: Friday, January 4, 2013 9:19 PM
Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

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Bill

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11245. RE: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:23:20 UTC
From: Bob Spooner
Topic: 11228 Message: 11245

Tim and all,

Are you sure that your Heathkit dummy was 50 Ohms? I had a cantenna that I tested when I built it but about 30 years later the resistance had doubled. I now have a Bird dummy load that I use for tuning and testing.

73,

Bob AD3K

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of amfone
Sent: Saturday, January 05, 2013 11:04 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yep it can happen Charles. I went against my better judgment and purchased 50 feet of used cable at a swap in August. About three weeks ago I wanted to test it. I did a simple test, transmitter at 100 watts, cable under test that I purchased and a dummy load from Heath Kit. I was getting about 10 watts reflected as I recall. The cable appearing good was no longer 50 ohms. Like I said it will start aging even if it looks good. On good visual check is to peal back the outer case and look at the braid, if its tarnished its not good cable. Win some lose some.

73 tim
WB8UHZ

From: Charles Ring w3nu@... <mailto:w3nu%40roadrunner.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Cc: amfone amfone20000@... <mailto:amfone20000%40yahoo.com> >
Sent: Friday, January 4, 2013 9:59 PM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

On 1/4/2013 2135, amfone wrote:
>
> Yes NOS will fail over time even if not used. The shelf life of an
> electrolytic is about 15 years they start to age as soon as they are
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> the box and not used" but coax starts the aging process as soon as its
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In 1968 I bought ten feet of "Columbia Super Flex" RG-8/U coax, cut it into 3 pieces and put connectors on it. All 3 pieces are still in use now and working good as new. Replaced the connectors on one piece a year ago.

--
Charles Ring W3NU

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11246. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:51:09 UTC
From: amfone
Topic: 11228 Message: 11246

Bob

I tested it with other like arrangements and the cantenna worked well.

From: Bob Spooner <rls19@psu.edu>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, January 5, 2013 11:23 AM
Subject: RE: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Tim and all,

Are you sure that your Heathkit dummy was 50 Ohms? I had a cantenna that I tested when I built it but about 30 years later the resistance had doubled. I now have a Bird dummy load that I use for tuning and testing.

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Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

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11247. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 16:55:56 UTC
From: Keith Evans
Topic: 11202 Message: 11247

Hi Gary,
Its amasing the misconception of what frequency is actually being displayed..
73
HNY
Keith G3VKW

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, January 05, 2013 4:03 PM
Subject: Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Goran -

Ok, valid points. I'm not a contester, so rarely have to know exact frequency. I 'grew up' with NO
frequency display, as the entire Novice amateur band was a little over 1/8" wide on a metal dial
plate!! :-)

I must admit I still get a laugh at the guys sitting in a round table arguing over who is 10 Hz 'off
frequency' when NONE of them is actually where their 'digital dials' tells them they are! :-)

Enjoy your Drakes, any way you want them!

Happy New Year.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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sm7dlk wrote:
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>>> Dont forget to pay attention to the input sensitivity. Drake`s Injection signal tend to
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"cruising" on the band I should think twice before adding it.
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>>> 73
>>> Goran SM7DLK
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>>>

[Non-text portions of this message have been removed]

11248. Outboard Frequency Display---Drakes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 17:09:37 UTC
From: Eddy Swynar
Topic: 11202 Message: 11248

On 2013-01-05, at 11:55 AM, Keith Evans wrote:

> Its amasing the misconception of what frequency is actually being displayed..
>

Hi Guys,

Well, I cut my eye-teeth on a 3rd-hand Hallicrafters S-77A general coverage receiver here, from the time I first got licensed in 1971, to 1985, when the XYL "...upgraded" me with a Christmas gift of a brand new Yaesu FT-980 transceiver...

To anyone who is unfamiliar, the S-77A is the AC/DC version of the S-40---and both had a frequency resolution of "...plus, or minus, one quarter inch"...! Contrast that to the frequency read-out of the '980---to the nearest TENTH of a Hertz---and the difference was quite astounding to one such as myself (like going from a Model "T" Ford, to a Mazzeratti, in one easy step!).

Maybe as a consequence of this "impoverished" background, I really & truly do NOT mind the existing analog frequency read-outs of any of the Drake "Twins" whatsoever---in fact, I wish I had stuff that was even HALF as good back as my R-4 / T-4X combo back in '71!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

11249. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 17:18:08 UTC
From: Jim Shorney
Topic: 11202 Message: 11249

I wonder how much good DX has been missed because someone didn't find it on the exact frequency that was posted on a DX cluster. In this modern age, we still need to tune. A digital display (or any display, for that matter) is only as good as the operator behind the knob.

73

-Jim
NU0C

On Sat, 5 Jan 2013 16:55:56 +0000, Keith Evans wrote:

>Hi Gary,
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>73
>HNY
>Keith G3VKW
>
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, January 05, 2013 4:03 PM
> Subject: Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins
>
>
>
> Goran -
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> Ok, valid points. I'm not a contester, so rarely have to know exact frequency. I 'grew up' with NO
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> Happy New Year.
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> sm7dlk wrote:
> > Gary,
> >
> > I agree with you that R-4C is accurate when calibrated.
> > But one advantage with the digital display is that I no longer need to use the Calibration-switch. What I see is what I always get. This is also a great feature when switching between Bands. No need to re-calibrate at band switch or when moving across the entire band.
> >
> > I always use narrow filters and on very weak sigs at noise-level sometimes the 10Hz resolution is also good to know. On 160 m the sigs can be completely gone for minutes and if I know the digit I know exactly where to listen.
> >
> > Perhaps this is also personal. It's a matter of taste. I have nothing against an analogue display. I grew up with it. But I feel a "number" is easier to handle when part of the brain is linked to the computer screen.
> >
> > I modify my R-4C because it satisfy me and as a result I have a much better RX compared to my FT-1000
> >
> > Goran SM7DLK
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >> Goran -
> >>
> >> Please explain to me why a digital display is 'a must' for low band DXing. I can easily set ANY of
> >> the Drake 4 Series radios to within ~100 Hz of a specified frequency using only the Calibrator and
> >> original dial. That is certainly close enough to 'find' any specified station, perhaps with a 600
> >> Hz tone rather than a 400 Hz, or a slightly garbled SSB signal.
> >>
> >> I have no problem with those who prefer digital dials, and/or who want to modify their own radios, I
> >> just don't understand the need to make such drastic modifications to an existing radio. It's
> >> certainly much easier and cheaper to build a radio with a digital dial, one of the toughest things
> >> to design is a good variable oscillator that is linear across a range.
> >>
> >> Just wondering.

> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> sm7dlk wrote:
> >>> My view on digital display:
> >>>
> >>> For serious lowband DX-ing a digital display is a must and if you dont build your own there are many alternatives. I have two R-4C, both with digital display. One built in and one external.
> >>>
> >>> The first I did was the FCC-1 from Norcal (no longer available). This was realy a good kit and it fit perfect inside the R-4C behind the front panel. The display in the FCC-1 was without backlight. A display with backlight is only sligtly thicker, but make sure you pick one with backlight otherwise you will regret it later on.
> >>>
> >>> The second I did was from this site (http://www.hamradio.in/circuits/freq_counter_lcd.php). The PCB-layout and software is all in there. Easy to build.
> >>>
> >>> Dont forget to pay attention to the input sensitivity. Drake`s Injection signal tend to be lower at higher frequency.
> >>>
> >>> As said, using the Drake for serious DX-ing, digital is a must. But for ordinary "cruising" on the band I should think twice before adding it.
> >>>
> >>> 73
> >>> Goran SM7DLK
> >>>
> >>>
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11250. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 17:28:10 UTC
From: Eddy Swynar
Topic: 11202 Message: 11250

On 2013-01-05, at 12:18 PM, Jim Shorney wrote:

>
> I wonder how much good DX has been missed because someone didn't find it on the
> exact frequency that was posted on a DX cluster. In this modern age, we still
> need to tune. A digital display (or any display, for that matter) is only as
> good as the operator behind the knob.
>

Hi Jim,

You reference what is surely a double-edged sword! Hi Hi

I wonder how many guys have grown frustrated at the QRM generated by so-called "DX'ers" who no longer comb the bands themselves, but have their eyes glued onto the screen of their laptop, then call "blind" whenever they see something posted that's interesting...?

There's still a LOT to be said for the old adage of "...listen, LISTEN, then L-I-S-T-E-N again!" whenever it comes to chasing (and successfully CATCHING!) DX...

You're right: just as in a car, a radio station is only as effective as the nut behind the wheel / dial! :o)

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

11251. Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 17:39:00 UTC
From: Tom
Topic: 11251 Message: 11251

Hi, I'm trying to figure out whether I can use an Astatic T2M microphone with my T-4X. I have the proper three-contact plug, Switchcraft as I recall.

The mic has the keypad which of course I do not need. It has a 4-pin connector with red, black, clear and bare leads.

My t-4x manual instructs how to wire based on the PTT, mic and common leads. I've made one try at tracing the leads through the mic circuit board but haven't figured out which is which, hard to see under the two pots on the board.

I found one reference which said tip is black for PTT, ring is clear for mic "hot" and shield is ground wire common to PTT/mic but that's for a 3-wire mic....

Advice? Can I leave the keypad in there? Thanks 73

11252. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 18:24:58 UTC
From: Steve Wedge
Topic: 11228 Message: 11252

Finally had to replace some 25-yo 9913 last year. It was working okay up until last year.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jan 5, 2013, at 10:01 AM, David Winfree <davidwinfree@...> wrote:

> Does anyone here know the aging mechanism in RF Coax? I have had to replace 42
> year old RG59 recently in my Dad's attic, that had become lossy. Seems to me
> that solid polyethylene and copper wire are very stable, especially if away from
> UV (sunlight) and sulphur compounds. But, something clearly is working on coax
> over the years to cause loss. I'm going to suggest it is all dielectric loss.
> One easy test is to strip out some of the center insulation from suspect coax,
> put it in a home microwave with a cup of water in there to prevent oven damage.
> Lossy plastic will heat up.
>
> _____
> From: amfone amfone20000@...>
> To: "DrakeRadio@yahoogroups.com" DrakeRadio@yahoogroups.com>
> Cc: heathkit group HeathKit-Radios@yahoogroups.com>
> Sent: Fri, January 4, 2013 9:55:49 PM
> Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)
>
> Yes the aging process starts immediately. NOS caps are aged. Electrolytics have
> about a 15 year shelf life even if not used. This is not to say they will not
> function but they have aged. This is similar to coax cable, you can buy new
> never used cable that is 10 years old but all it means is that it is 10 years
> old and aged, as coax starts the aging process as soon as its made.
>
> New gear frequently has electrolytic's fail and they are replaced all the time.
> New components can fail too but not as likely.
>
> 73
> TIM
> WB8UHZ
>
> _____
> From: William Houghton rdrbill@...>
> To: DrakeRadio@yahoogroups.com
> Cc: heathkit group HeathKit-Radios@yahoogroups.com>
> Sent: Friday, January 4, 2013 9:19 PM
> Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)
>
> All,
>

> Does anyone know the failure mechanism(s) of electrolytic capacitors? I have
> heard/read that the electrolyte dies out over time. We all know to replace them
> in our old tube rigs. Does this happen only while voltage is applied? Does this
> happen to NOS caps that have never been used? I have seen several NOS caps sold
> on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer
>
> is simply ignorant.
>
> Also, I have never heard of anyone replacing electrolyitc caps in solid state
> gear even though a lot of early SS gear is now 35+ years old.
>
> 73,
>
> Bill
>
> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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>

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11253. Re: [DrakeRadio] Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 18:40:21 UTC
From: Jim Shorney
Topic: 11251 Message: 11253

See: http://canadianastatic.com/Canadian_Astatic/CB_Microphone_T2M.html

It's a pre-amped electret, so it should work. How you power it will depend on which version you have, but it's not going to be "plug-and-play".

73

-Jim
NU0C

On Sat, 05 Jan 2013 17:39:00 -0000, Tom wrote:

>Hi, I'm trying to figure out whether I can use an Astatic T2M microphone with my T-4X. I have the proper three-contact plug, Switchcraft as I recall.

>The mic has the keypad which of course I do not need. It has a 4-pin connector with red, black, clear and bare leads.

>My t-4x manual instructs how to wire based on the PTT, mic and common leads. I've made one try at tracing the leads through the mic circuit board but haven't figured out which is which, hard to see under the two pots on the board.

>I found one reference which said tip is black for PTT, ring is clear for mic "hot" and shield is ground wire common to PTT/mic but that's for a 3-wire mic....

>Advice? Can I leave the keypad in there? Thanks 73

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11254. Re: [DrakeRadio] Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 18:50:51 UTC
From: Ken Winterling
Topic: 11251 Message: 11254

Tom,

There are several versions of the T2M but I do not have information for any of them. I believe, however, all are low impedance electret mics that will require 3-12VDC (I believe...) to operate. Unless you build an interface to provide power, and possibly impedance matching, you will not be able to use that mic with your T-4X.

Ken
WA2LBI

On Sat, Jan 5, 2013 at 12:39 PM, Tom <ptgumc@...> wrote:

> Hi, I'm trying to figure out whether I can use an Astatic T2M microphone
> with my T-4X. I have the proper three-contact plug, Switchcraft as I
> recall.
>
> The mic has the keypad which of course I do not need. It has a 4-pin
> connector with red, black, clear and bare leads.
>
> My t-4x manual instructs how to wire based on the PTT, mic and common
> leads. I've made one try at tracing the leads through the mic circuit
> board but haven't figured out which is which, hard to see under the two
> pots on the board.
>
> I found one reference which said tip is black for PTT, ring is clear for
> mic "hot" and shield is ground wire common to PTT/mic but that's for a
> 3-wire mic....
>
> Advice? Can I leave the keypad in there? Thanks 73
>
>

[Non-text portions of this message have been removed]

11255. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 19:13:19 UTC
From: amfone
Topic: 11228 Message: 11255

When they go they go!

_____
From: Steve Wedge <w1es1982@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Saturday, January 5, 2013 1:24 PM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Finally had to replace some 25-yo 9913 last year. It was working okay up until last year.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jan 5, 2013, at 10:01 AM, David Winfree davidwinfree@...> wrote:

> Does anyone here know the aging mechanism in RF Coax? I have had to replace 42
> year old RG59 recently in my Dad's attic, that had become lossy. Seems to me
> that solid polyethylene and copper wire are very stable, especially if away from
> UV (sunlight) and sulphur compounds. But, something clearly is working on coax
> over the years to cause loss. I'm going to suggest it is all dielectric loss.
> One easy test is to strip out some of the center insulation from suspect coax,
> put it in a home microwave with a cup of water in there to prevent oven damage.
> Lossy plastic will heat up.
>
> _____
> From: amfone amfone20000@...>
> To: "DrakeRadio@yahoogroups.comDrakeRadio@yahoogroups.com>
> Cc: heathkit group HeathKit-Radios@yahoogroups.com>
> Sent: Fri, January 4, 2013 9:55:49 PM
> Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)
>
> Yes the aging process starts immediately. NOS caps are aged. Electrolytics have
> about a 15 year shelf life even if not used. This is not to say they will not
> function but they have aged. This is similar to coax cable, you can buy new
> never used cable that is 10 years old but all it means is that it is 10 years
> old and aged, as coax starts the aging process as soon as its made.
>
> New gear frequently has electrolytic's fail and they are replaced all the time.
> New components can fail too but not as likely.
>
> 73
> TIM
> WB8UHZ
>
> _____

> From: William Houghton rdrbill@...>
> To: DrakeRadio@yahoogroups.com
> Cc: heathkit group HeathKit-Radios@yahoogroups.com>
> Sent: Friday, January 4, 2013 9:19 PM
> Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)
>
> All,
>
> Does anyone know the failure mechanism(s) of electrolytic capacitors? I have
> heard/read that the electrolyte dies out over time. We all know to replace them
> in our old tube rigs. Does this happen only while voltage is applied? Does this
> happen to NOS caps that have never been used? I have seen several NOS caps sold
> on ebay and I can't imagine why anyone would buy 30 yr old caps unless the buyer
>
> is simply ignorant.
>
> Also, I have never heard of anyone replacing electrolyitc caps in solid state
> gear even though a lot of early SS gear is now 35+ years old.
>
> 73,
>
> Bill
>
> [Non-text portions of this message have been removed]
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>

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11256. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 19:33:46 UTC
From: w6mqi
Topic: 10629 Message: 11256

I'm back to trying to find out why there's power fluctuation only in TUNE on all bands with my T4XC. Pulled out C102 and didn't look to see it's correct placement in the board for polarity so I could put it back correctly. The cap has a black stripe going around it, and on one leg there's a break in the stripe would this be the positive leg? I'm usually pretty good about marking or taking pictures , but this time I got a little a head of myself.

Dave

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Dave -
>
> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
> have a scope, you could even connect a set of headphones or possibly a small speaker tothe 'output'
> end of C102. I'd say it's a likely suspect. You could try a reasonable substitute for C102, a 0.47
> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes through
> S1D(r), DeoxIT here.
>
> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
> can confirm a clean audio tone on the negative end of C102. IF the audio is 'unsteady', you'll need
> to extend your 'listening tour' back to the grid of V9b.
>
> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
> replace it....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> w6mqi wrote:
> > Garey
> > If your still around I did some test and part replacements to try and solve my power fluctuation which is not confined to just 40m. I swapped out V9 with several and no change,

replaced CR15, and CR19 no change, with transmitter in (CW) power output is rock solid problem is only in (TUNE). I originally thought just 40m as I said earlier, but I know now it's on 15m, and 10m as well any thoughts?
> >
> > 73,Dave
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >> Dave -
> >>
> >> Easiest, safest place is on the wiper (center terminal) of the CAR BAL pot. Key transmitter in TUNE
> >> with GAIN full CCW.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> w6mqi wrote:
> >>> Thanks for putting up with all my neophyte questions Garey my training is not electronics, but construction and aviation figure that combination out! Anyway I have one more question where would be the best place to attach the counter to the CAR OSC to check the freq on the B-line? On the C-line the counter is attached to the CAR OSC jack on the back of the XMTR.
> >>>
> >>> Dave
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >>>> Dave -
> >>>>
> >>>> I think this is a result of the sharper filter skirts of the 8 pole filters in the B and C line.
> >>>> The problem is that even with the CAR BAL control turned ALL (10 turns) the way one way or another,
> >>>> there still isn't enough signal to drive the following stages for RF output from the transmitter.
> >>>>
> >>>> What you are trying to do is to center the CAR OSC between the two filter passbands, i.e., if you
> >>>> visualize the two filter passbands as a letter "M", you want to set the CAR OSC at the bottom of the
> >>>> center v of the "M". This 'should be' 5.645 MHz.
> >>>>
> >>>> One alternative is to just tune T14, 3 and 2 for maximum output as you did,and then set the CAR
> >>>> OSCto exactly 5.645000 MHz with an accurate counter.
> >>>>
> >>>> I do the procedure as specified, except instead of looking for output power, I just put a scope

> >>>> probe on the antenna lead. There is plenty of signal this way. then you can also rebalance the BAL
> >>>> MOD using this same setup. You can also use the receiver by connecting the receiver antenna to the
> >>>> transmitter output via a capacity "T", but obviously if you key the transmitter at full power,
> >>>> you'll need a new T1 in the receiver!! :-)
> >>>>
> >>>> Since you have the transformers peaked, if you have an accurate counter just set the CAR OSC to
> >>>> 5.645000 MHz and rebal the BAL MOD.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>>
> >>>>
> >>>> w6mqi wrote:
> >>>>> Garey
> >>>>> Yep this is a strange one a band specific power fluctuation. I think I'll start by checking and cleaning the switch contacts if nothing happens then I'll dig deeper. Since tune up and operation is fine in CW mode I could just let it go and call it fixed hihi.
> >>>>> ---
> >>>>> A while back I was working on another T4XC of mine which had low power output starting around 15 meters and progressively getting worse on 10 meters (10 watts max output). I went through the unit using the alignment procedures in the manual, and found that procedure 5.9 just would not work per the manual I couldn't get any current movement on the plate meter to adjust T14, T3, and T2. So I gave up and just tweaked T14,T3, and T2 for max power output on the pwr/swr meter attached to the T4XC and behold I now get 100 watts out on all bands now. Garey was this the right way to go about adjusting T14,T3,and T2? or should have I just continued trying the Drake manual way?
> >>>>>
> >>>>> 73,Dave
> >>>>>
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >>>>>> Dave -
> >>>>>>
> >>>>>> Ahhh. Key piece of information. I can't say why it would only present on 40M as there are no 'band
> >>>>>> specific' circuits that are different between CW and TUNE.
> >>>>>>
> >>>>>> Primary difference between TUNE and CW is method of signal generation.
> >>>>>>
> >>>>>> On CW, the Carrier Oscillator is just shifted into the passband of the LSB filter, the Balanced
> >>>>>> Modulator is unbalanced to allow the CO through, and then amplified through the PA and out.

> >>>>>>
> >>>>>> On SSB (TUNE), V9a is converted to an audio oscillator generating ~1 kHz tone, amplified by V9b, and
> >>>>>> coupled by C102 to the Balanced Modulator. Think whistling into the microphone. So... Start by
> >>>>>> subbing V9. If not, look at CR15, watch the DC bias on it (should be reverse biased [+ voltage] to
> >>>>>> see if it's fluctuating. If not, I'd next look at C102, a 1uF tantalum. If not, a scope would be a
> >>>>>> big help. Something is happening to the audio signal from V9 between V9a and the Bal Mod. There are
> >>>>>> several switch contactsets between V9 and the Bal Mod that 'could' be a problem, but ...
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>>
> >>>>>>
> >>>>>> w6mqi wrote:
> >>>>>>> I just checked and the power fluctuation seems to only happen in TUNE not CW.
> >>>>>>>
> >>>>>>> Dave
> >>>>>>>
> >>>>>>> --- In DrakeRadio@yahoogroups.com, "w6mqi" wrote:
> >>>>>>>> I have a T4XC which has a power fluctuation only on 40 meters all other bands seem okay. As I tune up the T4XC in TUNE I find the plate meter readings very twitchy or jumping around as I try to dip the plate, once tuned I can watch my pwr/swr meter jump a few watts then at times as mush as 10 or 20 watts back a forth. Could this be a indication of Tx power fluctuation caused by CR19 that Ron Baker (WB4HFN) talks about? I may also clean all the rotary switches although they all look real clean.
> >>>>>>>>
> >>>>>>>> 73,Dave
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
> >
>

11257. Re: [DrakeRadio] Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 19:41:30 UTC
From: J JONES
Topic: 11236 Message: 11257

Hi Eddie,
The socket is round approx 3/4 inch with 4 pins/sockets, the pins are not equally spaced, the top pair are further apart than the bottom pair. I could send a photo but will have to disconnect the gear.

Many thanks
Howarth. GW3TMP

From: Ernie Gray <w1mrq@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Saturday, 5 January 2013, 12:09
Subject: Re: [DrakeRadio] Cincl Plugs

Not familiar with R4 plugs. What does it look like? I'll check

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: "mailto:jhj43%40btinternet.com" mailto:jhj43%40btinternet.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Saturday, January 5, 2013 7:04 AM
Subject: [DrakeRadio] Cincl Plugs

Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11258. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 20:30:12 UTC
From: Garey Barrell
Topic: 10629 Message: 11258

Dave -

I'm not sure. Looking at the CD, there is a blue stripe on the 'left' side of C102, and that is the
lead that is tied to R82 and Pin 8 of V9, which is the positive side according to the schematic.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> I'm back to trying to find out why there's power fluctuation only in TUNE on all bands with my T4XC. Pulled out C102 and didn't look to see it's correct placement in the board for polarity so I could put it back correctly. The cap has a black stripe going around it, and on one leg there's a break in the stripe would this be the positive leg? I'm usually pretty good about marking or taking pictures , but this time I got a little a head of myself.
>
> Dave
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Dave -
>>
>> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
>> have a scope, you could even connect a set of headphones or possibly a small speaker tothe 'output'
>> end of C102. I'd say it's a likely suspect. You could try a reasonable substitute for C102, a 0.47
>> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes through
>> S1D(r), DeoxIT here.
>>
>> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
>> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
>> can confirm a clean audio tone on the negative end of C102. IF the audio is 'unsteady', you'll need
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>>
>> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
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>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
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>>>>>>>>>> 73,Dave

11259. Re: [DrakeRadio] Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 20:32:11 UTC
From: David Winfree
Topic: 11251 Message: 11259

I'm using a lo z aviation headset with my t4x and get good signal reports. Mouser has small audio xformers, a 9v batt and one
resistor and cap. I use a yoke ptt and there is no batt drain unless ptt is hit

[Non-text portions of this message have been removed]

11260. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 20:33:07 UTC
From: Garey Barrell
Topic: 10629 Message: 11260

Dave -

Just looking at the schematic again, have you tried swapping V1. That is the transmit ALC control,
and ALC does NOT work on CW. Seems I've run into this before.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
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>> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes through
>> S1D(r), DeoxIT here.
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>> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
>> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
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>> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
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11261. Re: [DrakeRadio] Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 20:38:59 UTC
From: Garey Barrell
Topic: 11236 Message: 11261

This is the connector that Drake used for the Calibrator and Accessory sockets on everything from
the 2-A to the R4-C. They were hard to find in the 60's!!

They're similar to the polarized plugs that were used for multi-voltage battery packs in 'portable'
radios, and as speaker plugs in some auto radio setups.

I suspect the only place you're likely to find one today is in some Drake antiquarian like me, and I
don't have any! They are second only to the two pin Linear control plug in the hard to find class.
ANY junker receiver will have at least two, the 2-C has three! I think Drake bought a close-out
lot!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

J JONES wrote:
> Hi Eddie,
> The socket is round approx 3/4 inch with 4 pins/sockets, the pins are not equally spaced, the top pair are further apart than the bottom pair. I could send a photo but will have to disconnect the gear.
>
> Many thanks
> Howarth. GW3TMP
>
> From: Ernie Gray <w1mrq@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Saturday, 5 January 2013, 12:09
> Subject: Re: [DrakeRadio] Cincl Plugs
>
>
> Not familiar with R4 plugs. What does it look like? I'll check
>
> Ernie Gray
> W1MRQ
> PO Box 548
> Weare, NH, 03281
> 603-770-7408
>

> _____
> From: "mailto:jhj43%40btinternet.com" mailto:jhj43%40btinternet.com>
> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Saturday, January 5, 2013 7:04 AM
> Subject: [DrakeRadio] Cincl Plugs
>
>
> Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.

11262. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-05 23:58:07 UTC
From: w6mqi
Topic: 10629 Message: 11262

Garey
Swapping V1 did nothing also swapping out C102 with a .1uf cap for testing did nothing. The positive side of C102 is where the black stripe has a gap which goes to pin 8 V9B. I did notice that S1D(r) did look a little on the black side so I cleaned it with Deoxit real well this seemed to quiet things down, but there still some fluctuation happening.

Dave

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> Dave -
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> Just looking at the schematic again, have you tried swapping V1. That is the transmit ALC control,
> and ALC does NOT work on CW. Seems I've run into this before.
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11263. Re: [DrakeRadio] Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 00:06:03 UTC
From: Jim Shorney
Topic: 11236 Message: 11263

On Sat, 05 Jan 2013 15:38:59 -0500, Garey Barrell wrote:

>They're similar to the polarized plugs that were used for multi-voltage battery packs in 'portable'
>radios, and as speaker plugs in some auto radio setups.

These were prettly common in car stereo systems at least into the late 70's, when we started seeing BTL outputs and front/rear speaker systems. Most of them have since taken a dirt nap or gone to the scrap yard crusher. I think Radio Shack even sold replacement cable sets with that connector in days gone by. They seem to have gone extinct in the wild now, and those of us who need them have to homebrew them. Somewhere there's probably someone who is sitting on a warehouse full of NOS under-dash 8-track players that has a ton of them. I've been looking...

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11264. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 00:54:23 UTC
From: john
Topic: 11202 Message: 11264

At 12:18 PM 1/5/2013, Jim Shorney wrote:

>I wonder how much good DX has been missed because someone didn't find it
>on the
>exact frequency that was posted on a DX cluster.

Excellent point Jim!

It does make it easier for those of us who know how to tune though....
there's some good news in everything. There's the phenomenon of someone
posting "up 5" when it's clear the DX is listening up 1. I've wondered if
that's an accident or a strategy!

John K5MO

11265. Re: Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 03:03:01 UTC
From: lgsracer
Topic: 11236 Message: 11265

--- In DrakeRadio@yahoogroups.com, "jhj43@..." wrote:
>
> Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.
>
You might want to try this:

4 pin circular male DIN connector

Part Number CON-0004

http://www.nkcelectronics.com/4-pin-circular-din-connecto.html

11266. Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 03:06:42 UTC
From: Paul Kraemer
Topic: 11228 Message: 11266

Often times the outer jacket material migrates in to contaminate the center insulation generally leaving it a bit discolored
Paul K0UYA
----- Original Message -----
From: "David Winfree" <davidwinfree@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, January 05, 2013 9:01 AM
Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)

> Does anyone here know the aging mechanism in RF Coax? I have had to
> replace 42
> year old RG59 recently in my Dad's attic, that had become lossy. Seems to
> me
> that solid polyethylene and copper wire are very stable, especially if
> away from
> UV (sunlight) and sulphur compounds. But, something clearly is working on
> coax
> over the years to cause loss. I'm going to suggest it is all dielectric
> loss.
> One easy test is to strip out some of the center insulation from suspect
> coax,
> put it in a home microwave with a cup of water in there to prevent oven
> damage.
> Lossy plastic will heat up.
>
>
>
>
> _____
> From: amfone <amfone20000@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Cc: heathkit group <HeathKit-Radios@yahoogroups.com>
> Sent: Fri, January 4, 2013 9:55:49 PM
> Subject: Re: [DrakeRadio] aluminum electrolytic capacitor failure
> mechanism(s)
>
>
> Yes the aging process starts immediately. NOS caps are aged. Electrolytics
> have
> about a 15 year shelf life even if not used. This is not to say they will
> not
> function but they have aged. This is similar to coax cable, you can buy
> new
> never used cable that is 10 years old but all it means is that it is 10

> years
> old and aged, as coax starts the aging process as soon as its made.
>
> New gear frequently has electrolytic's fail and they are replaced all the
> time.
> New components can fail too but not as likely.
>
> 73
> TIM
> WB8UHZ
>
> _____
> From: William Houghton rdrbill@...>
> To: DrakeRadio@yahoogroups.com
> Cc: heathkit group HeathKit-Radios@yahoogroups.com>
> Sent: Friday, January 4, 2013 9:19 PM
> Subject: [DrakeRadio] aluminum electrolytic capacitor failure mechanism(s)
>
>
>
> All,
>
> Does anyone know the failure mechanism(s) of electrolytic capacitors? I
> have
> heard/read that the electrolyte dies out over time. We all know to replace
> them
> in our old tube rigs. Does this happen only while voltage is applied? Does
> this
> happen to NOS caps that have never been used? I have seen several NOS caps
> sold
> on ebay and I can't imagine why anyone would buy 30 yr old caps unless the
> buyer
>
> is simply ignorant.
>
> Also, I have never heard of anyone replacing electrolyitc caps in solid
> state
> gear even though a lot of early SS gear is now 35+ years old.
>
> 73,
>
> Bill
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>
>

> [Non-text portions of this message have been removed]
>
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>
> Yahoo! Groups Links
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>
>

11267. I need light bulbs for the S-meter panel on my Drake R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 03:28:32 UTC
From: CraigMcAllister
Topic: 11267 Message: 11267

Can anybody recommend where to find replacement light bulbs for my S-meter panel window on my R4c, any help would be appreciated.

11268. Re: [DrakeRadio] Re: Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 05:46:38 UTC
From: Jim Shorney
Topic: 11236 Message: 11268

The pattern looks about right, but being DIN, the dimensions are probably
Metric. My guess is that it wouldn't mate up properly.

Ken's Electronics is listing the 5AB2 as "out of stock / disc / nla". He might
have the dimensions.

http://www.kenselectronics.com/lists/lists/pwrcord.htm

73

-Jim
NU0C

On Sun, 06 Jan 2013 03:03:01 -0000, lgsracer wrote:

>--- In DrakeRadio@yahoogroups.com, "jhj43@..." wrote:
>>
>> Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in
their junk box I would be very grateful.
>>
>You might want to try this:
>
>4 pin circular male DIN connector
>
>Part Number CON-0004
>
>http://www.nkcelectronics.com/4-pin-circular-din-connecto.html

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11269. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 05:56:16 UTC
From: Jim Shorney
Topic: 11202 Message: 11269

On Sat, 05 Jan 2013 19:54:23 -0500, john wrote:

>There's the phenomenon of someone
>posting "up 5" when it's clear the DX is listening up 1. I've wondered if
>that's an accident or a strategy!

I've noticed a tendency for people to post the frequency that they worked the DX on. This is especially apparent when the DX is announcing a listening range, like "up 5-10". The spots will jump all over the place with different reports. Whether this is intentional or an effect of automated spots from a logging program that pulls frequency data from the radio, who knows? I just listen for the pile and try to slip in through a lull.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11270. Re: [DrakeRadio] I need light bulbs for the S-meter panel on my Drake R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 06:06:41 UTC
From: Jim Shorney
Topic: 11267 Message: 11270

What you are looking for is a #47 lamp. Plenty of internet sources carry these. Well stocked auto parts stores used to carry them, and even Ace Hardware may still have them. Radio Shack has something that may be usable, SKU# 272-1110. Garey can tell you the number for a longer-life equivalent.

If you want to make the purists cringe, Cointaker has a "warm white" LED replacement that actually looks pretty good in some applications. Cheap, too. I ordered a bag of 10 a few months ago, they came in well under 10 bucks and arrived promptly.

http://shop.cointaker.com/product.sc?productId=31&categoryId=6

Other vendors, including some hams, also sell LED replacements. Some are drop-in like the Cointaker lamps, some require modification.

73

-Jim
NU0C

On Sun, 06 Jan 2013 03:28:32 -0000, CraigMcAllister wrote:

>Can anybody recommend where to find replacement light bulbs for my S-meter panel window on my R4c, any help would be appreciated.
>
>

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

11271. Re: [DrakeRadio] I need light bulbs for the S-meter panel on my Drake R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 06:41:39 UTC
From: Ken Winterling
Topic: 11267 Message: 11271

The #755 is the long life equivalent of the #47 lamp.

On Sunday, January 6, 2013, Jim Shorney <jshorney@...> wrote:
>
> What you are looking for is a #47 lamp. Plenty of internet sources carry
these.
> Well stocked auto parts stores used to carry them, and even Ace Hardware
may
> still have them. Radio Shack has something that may be usable, SKU#
272-1110.
> Garey can tell you the number for a longer-life equivalent.
>
> If you want to make the purists cringe, Cointaker has a "warm white" LED
> replacement that actually looks pretty good in some applications. Cheap,
too. I
> ordered a bag of 10 a few months ago, they came in well under 10 bucks and
> arrived promptly.
>
> http://shop.cointaker.com/product.sc?productId=31&categoryId=6
>
> Other vendors, including some hams, also sell LED replacements. Some are
> drop-in like the Cointaker lamps, some require modification.
>
> 73
>
> -Jim
> NU0C
>
>
> On Sun, 06 Jan 2013 03:28:32 -0000, CraigMcAllister wrote:
>
>>Can anybody recommend where to find replacement light bulbs for my
S-meter panel window on my R4c, any help would be appreciated.

--

Ken
WA2LBI

[Non-text portions of this message have been removed]

11272. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 07:27:35 UTC
From: Richard Knoppow
Topic: 11202 Message: 11272

```
----- Original Message -----
From: "john" <johnmb@...>
To: <DrakeRadio@yahoogroups.com>;
<DrakeRadio@yahoogroups.com>
Sent: Saturday, January 05, 2013 4:54 PM
Subject: Re: [DrakeRadio] Re: Simple Outboard Digital
Frequency Display for the Drake Twins

> At 12:18 PM 1/5/2013, Jim Shorney wrote:
>
>>I wonder how much good DX has been missed because someone
>>didn't find it
>>on the
>>exact frequency that was posted on a DX cluster.
>
>
> Excellent point Jim!
>
> It does make it easier for those of us who know how to
> tune though....
> there's some good news in everything. There's the
> phenomenon of someone
> posting "up 5" when it's clear the DX is listening up 1.
> I've wondered if
> that's an accident or a strategy!
>
> John K5MO
>
>
All I can say is I don't see the fun in anything so
formalized and serious. Anyone who has enough money to have
a good location and excellent antennas can do well at DX or
contests. I really think this has become a game for those
who are not really much interested in _radio_.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

11273. Re: [DrakeRadio] I need light bulbs for the S-meter panel on my Drake R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 07:29:54 UTC
From: Richard Knoppow
Topic: 11267 Message: 11273

```
----- Original Message -----
From: "Jim Shorney" <jshorney@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, January 05, 2013 10:06 PM
Subject: Re: [DrakeRadio] I need light bulbs for the S-meter
panel on my Drake R4C

>
> What you are looking for is a #47 lamp. Plenty of internet
> sources carry these.
> Well stocked auto parts stores used to carry them, and
> even Ace Hardware may
> still have them. Radio Shack has something that may be
> usable, SKU# 272-1110.
> Garey can tell you the number for a longer-life
> equivalent.
>
> If you want to make the purists cringe, Cointaker has a
> "warm white" LED
> replacement that actually looks pretty good in some
> applications. Cheap, too. I
> ordered a bag of 10 a few months ago, they came in well
> under 10 bucks and
> arrived promptly.
>
> http://shop.cointaker.com/product.sc?productId=31&categoryId=6
>
> Other vendors, including some hams, also sell LED
> replacements. Some are
> drop-in like the Cointaker lamps, some require
> modification.
>
> 73
>
> -Jim
> NU0C
>
All of the Radio Shack stores locally (a bunch) have
No.47 lamps. Cheap. I have noticed that the envelopes
sometimes cast shadows, something I don't see on the old
brass-based GE lamps.

--
Richard Knoppow
```

Los Angeles
WB6KBL
dickburk@...

11274. Re: Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 08:33:01 UTC
From: lgsracer
Topic: 11236 Message: 11274

They still make chassis mount female connectors for DIN 4 pins so if nothing else you change out the Cinch for a complete DIN setup.

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" wrote:
>
>
> The pattern looks about right, but being DIN, the dimensions are probably
> Metric. My guess is that it wouldn't mate up properly.
>
> Ken's Electronics is listing the 5AB2 as "out of stock / disc / nla". He might
> have the dimensions.
>
> http://www.kenselectronics.com/lists/lists/pwrcord.htm
>
> 73
>
> -Jim
> NU0C
>
>
>
> On Sun, 06 Jan 2013 03:03:01 -0000, lgsracer wrote:
>
> >--- In DrakeRadio@yahoogroups.com, "jhj43@" wrote:
> >>
> >> Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.
> >>
> >You might want to try this:
> >
> >4 pin circular male DIN connector
> >
> >Part Number CON-0004
> >
> >http://www.nkcelectronics.com/4-pin-circular-din-connecto.html
>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>

> "Give a man a URL, and he will learn for an hour; teach him to Google,
and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>

11275. Re: [DrakeRadio] Re: Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 16:07:25 UTC
From: Garey Barrell
Topic: 11236 Message: 11275

I got a little carried away the other day on this. There are at least two of the 'female' of this
connector set on each Drake receiver from the 2-A to the R-4C. Unfortunately, the ONLY 'male'
version is found on the Q-Multipliers, 2A, B and CQ. The Calibrator 'plug' is a part of the circuit
board, so isn't much help here.

The DIN plug suggested by someone 'might' work. If anyone wants to try it, or start a 'cottage
industry', I just added a drawing to the FILES section of the list. I can't find my 'real' drawing
program, so this is a 'non-scale' version in PAINT, which I had never tried to use before. I havea
lot more respect for Gary Johanson' and his vintage schematic drawing program, also done in paint.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> The pattern looks about right, but being DIN, the dimensions are probably
> Metric. My guess is that it wouldn't mate up properly.
>
> Ken's Electronics is listing the 5AB2 as "out of stock / disc / nla". He might
> have the dimensions.
>
> http://www.kenselectronics.com/lists/lists/pwrcord.htm
>
> 73
>
> -Jim
> NU0C
>
>
>
> On Sun, 06 Jan 2013 03:03:01 -0000, lgsracer wrote:
>
>> --- In DrakeRadio@yahoogroups.com, "jhj43@..." wrote:
>>> Hi all, I am still looking for a Cinch Plug type 5AB2 for my R-4C. If anyone has one in their junk box I would be very grateful.
>>>

>> You might want to try this:
>>
>> 4 pin circular male DIN connector
>>
>> Part Number CON-0004
>>
>> http://www.nkcelectronics.com/4-pin-circular-din-connecto.html
>

11276. Rx to Tx VFO causes Rx signal drop

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 16:11:35 UTC
From: wb4spt
Topic: 11276 Message: 11276

T4X/R4A:

In my situation at least two bands show a full S unit drop in Rx performance when I go from Rx to Tx freq control. I'm going to suppose this is due to less than optimum Tx injection into the Rx.

There are some hard to understand references in the Tx alignment instructions about plugging into the INJ port and using a sig gen for tuneup. Anyway, I don't have access right now to a sig gen, so is there an "on the air" tuneup I can perform to increase the INJ level into the Rx? Maybe more to the point: should I be adjusting the Rx or the Tx INJ trimmers? Yes, I'm using RG62, maybe 2' long as INJ cable.
WB4SPT

11277. Re: Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 16:13:38 UTC
From: Tom
Topic: 11251 Message: 11277

Well, I learn something(s) every day. Bought that at a hamfest for $2 because I liked the cord and retro look and feel. No idea mics require power or that mics for CB differ that much from ham.

--- In DrakeRadio@yahoogroups.com, "Tom" wrote:
>
> Hi, I'm trying to figure out whether I can use an Astatic T2M microphone with my T-4X. I have the proper three-contact plug, Switchcraft as I recall.
>
> The mic has the keypad which of course I do not need. It has a 4-pin connector with red, black, clear and bare leads.
>
> My t-4x manual instructs how to wire based on the PTT, mic and common leads. I've made one try at tracing the leads through the mic circuit board but haven't figured out which is which, hard to see under the two pots on the board.
>
> I found one reference which said tip is black for PTT, ring is clear for mic "hot" and shield is ground wire common to PTT/mic but that's for a 3-wire mic....
>
> Advice? Can I leave the keypad in there? Thanks 73
>

11278. Re: [DrakeRadio] Re: Astatic T2M mic wiring

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 17:04:53 UTC
From: Jim Shorney
Topic: 11251 Message: 11278

Yes, electret mics require power. So do mics that have DTMF keypads. Electrets have become quite popular in the two-way radio market, they are cheap to manufacture and sound good. There are quite a few of them on ham rigs these days. This is not a CB mic, rather, it was targeted at the commercial Land Mobile market. It would also be useful with a VHF/UHF ham rig that does not have a DTMF pad. It should also work nicely on your T-4x, as preamped electrets are high output and can drive a wide range of impedances. Depending on which verison you have, you can either power it directly from a 12VDC source or insert power on the audio line through a network of a resistor and a DC blocking cap.

73

-Jim
NU0C

On Sun, 06 Jan 2013 16:13:38 -0000, Tom wrote:

>
>Well, I learn something(s) every day. Bought that at a hamfest for $2 because I liked the cord and retro look and feel. No idea mics require power or that mics for CB differ that much from ham.

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11279. Re: [DrakeRadio] Rx to Tx VFO causes Rx signal drop

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 17:13:18 UTC
From: Garey Barrell
Topic: 11276 Message: 11279

That is excessive.

Best procedure is to align the INJ trimmers on both units, per the alignment procedure, with the two
cabled together. This will get them as good as they can be. Watch the RG-62 for shorts. It doesn't
like to be bent sharply, and it's easy to overheat when soldering connectors.

The signal generator into the INJ port is for radios that have had 'all the loose screwstightened',
or a brand new radio that has never been aligned.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

wb4spt wrote:
> T4X/R4A:
>
> In my situation at least two bands show a full S unit drop in Rx performance when I go from Rx to Tx freq control. I'm going to suppose this is due to less than optimum Tx injection into the Rx.
>
> There are some hard to understand references in the Tx alignment instructions about plugging into the INJ port and using a sig gen for tuneup. Anyway, I don't have access right now to a sig gen, so is there an "on the air" tuneup I can perform to increase the INJ level into the Rx? Maybe more to the point: should I be adjusting the Rx or the Tx INJ trimmers? Yes, I'm using RG62, maybe 2' long as INJ cable.
> WB4SPT
>
>

11280. Re: [DrakeRadio] Re: Simple Outboard Digital Frequency Display for the Drake Twins

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 17:16:25 UTC
From: Jim Shorney
Topic: 11202 Message: 11280

On Sat, 5 Jan 2013 23:27:35 -0800, Richard Knoppow wrote:

>All I can say is I don't see the fun in anything so
>formalized and serious. Anyone who has enough money to have
>a good location and excellent antennas can do well at DX or
>contests. I really think this has become a game for those
>who are not really much interested in _radio_.

The fun is in seeing how long it takes me to get to 200, after I uploaded 10 years worth of computer logs and found out I had DXCC!

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11281. Re: [DrakeRadio] Re: Cincl Plugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 17:24:38 UTC
From: Jim Shorney
Topic: 11236 Message: 11281

On Sun, 06 Jan 2013 11:07:25 -0500, Garey Barrell wrote:

>The DIN plug suggested by someone 'might' work. If anyone wants to try it

Thinking more about it, I've run across oddball power supply bricks in the past that had 4-pin DIN connectors. IIRC, the pins are smaller than the 5AB2, and the spacing is wrong.

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11282. R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 20:06:02 UTC
From: Victor
Topic: 594 Message: 11282

Garey
Shortly before Xmas I mentioned that I had a problem with the R-4C. As you will have dealt with hundreds of problems since then I'll refresh your memory.
The Rx works but suddenly the sensitivity went off on 20m. On 14.000khz I could just hear the calib sig but on 14.025 it was about S5. Go up to 14.050 and it was barely audible. Sigs were the same.
You suggested checking the pre-select rack which I have now done. All the slugs are sitting comfortably and all the same height - 11/32". Also checked and de-oxed the switching and all the associated wiring seems OK.
Now we come to the strange bit. On the top chassis there are 4 banks of trimmers and on each bank there is one marked 14.3. If I touch the 14.3 nearest the front panel (just underneath the meter) the 20m band comes back to life and this happens irrespective of what freq I have the PTO set at. A fraction of a turn of the trimmer to the left and the RX is alive and a fraction to the right leaves it deaf - this is on 20m the other bands are OK.
So, in a word, I'm lost. This is the second time this has happened and each time just barely touching that trimmer has brought 20m back to life.

Any ideas, please?
Vic
G4JSS

11283. Re: [DrakeRadio] R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 21:27:35 UTC
From: Keith Evans
Topic: 594 Message: 11283

Hi Vic,
Ok re Cinch Plug, Must have been another G stn.
The T4XC Xtal is the same as the R4C one, so swop it over, and see what happens.
Good Luck
Keith G3VKW

----- Original Message -----
From: Victor
To: DrakeRadio@yahoogroups.com
Sent: Sunday, January 06, 2013 8:06 PM
Subject: [DrakeRadio] R-4C

Garey
Shortly before Xmas I mentioned that I had a problem with the R-4C. As you will have dealt with hundreds of problems since then I'll refresh your memory.
The Rx works but suddenly the sensitivity went off on 20m. On 14.000khz I could just hear the calib sig but on 14.025 it was about S5. Go up to 14.050 and it was barely audible. Sigs were the same.
You suggested checking the pre-select rack which I have now done. All the slugs are sitting comfortably and all the same height - 11/32". Also checked and de-oxed the switching and all the associated wiring seems OK.
Now we come to the strange bit. On the top chassis there are 4 banks of trimmers and on each bank there is one marked 14.3. If I touch the 14.3 nearest the front panel (just underneath the meter) the 20m band comes back to life and this happens irrespective of what freq I have the PTO set at. A fraction of a turn of the trimmer to the left and the RX is alive and a fraction to the right leaves it deaf - this is on 20m the other bands are OK.
So, in a word, I'm lost. This is the second time this has happened and each time just barely touching that trimmer has brought 20m back to life.

Any ideas, please?
Vic
G4JSS

[Non-text portions of this message have been removed]

11284. Re: [DrakeRadio] R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-06 22:22:32 UTC
From: Richard Knoppow
Topic: 594 Message: 11284

----- Original Message -----
From: "Victor" <g4jss@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 06, 2013 12:06 PM
Subject: [DrakeRadio] R-4C

> Garey
> Shortly before Xmas I mentioned that I had a problem with
> the R-4C. As you will have dealt with hundreds of problems
> since then I'll refresh your memory.
> The Rx works but suddenly the sensitivity went off on 20m.
> On 14.000khz I could just hear the calib sig but on 14.025
> it was about S5. Go up to 14.050 and it was barely
> audible. Sigs were the same.
> You suggested checking the pre-select rack which I have
> now done. All the slugs are sitting comfortably and all
> the same height - 11/32". Also checked and de-oxed the
> switching and all the associated wiring seems OK.
> Now we come to the strange bit. On the top chassis there
> are 4 banks of trimmers and on each bank there is one
> marked 14.3. If I touch the 14.3 nearest the front panel
> (just underneath the meter) the 20m band comes back to
> life and this happens irrespective of what freq I have the
> PTO set at. A fraction of a turn of the trimmer to the
> left and the RX is alive and a fraction to the right
> leaves it deaf - this is on 20m the other bands are OK.
> So, in a word, I'm lost. This is the second time this has
> happened and each time just barely touching that trimmer
> has brought 20m back to life.
>
> Any ideas, please?
> Vic
> G4JSS
>
I think you have a bad trimmer. I am not sure what
kind of trimmers these are in the C model but it sounds like
this one is shorting. That can happen to compression
trimmers when some dirt gets between the plates and pokes
hole in the dielectric.
Try getting across its terminals with an ohm meter and
see if you see the short.

Trimmers will sometimes respond to cleaning. Open the
trimmer as far as you can and blow it out with spray
alcohol, then let it dry thoroughly. Its best if it can be

removed entirely but you may have some success without having to do so. If cleaning does not work you may have to replace it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11285. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 00:04:23 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 11285

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

11286. T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 01:33:46 UTC
From: Steve Wedge
Topic: 11286 Message: 11286

I've still got Krusty the Transmitter apart (an R-4B). When I had verified that I had got it working prior to stripping and cleaning, I do recall that receive was occasionally flaky. I figured I'd lightly hit the contacts with some 2000 grit paper but upon looking at the construction and where the relay is, it appears I'll have to take the RF deck apart.

Anything to watch out for underneath? It looks like a lot of work, but I'm into it this far so I might as well go the distance

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

11287. Re: [DrakeRadio] T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 01:38:45 UTC
From: Steve Wedge
Topic: 11286 Message: 11287

Sorry - meant T-4XB. No, you're not hallucinating...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Wedge
Sent: Sunday, January 06, 2013 8:33 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] T-4XB Relay Intermittent

I've still got Krusty the Transmitter apart (an R-4B). When I had verified that I had got it working prior to stripping and cleaning, I do recall that receive was occasionally flaky. I figured I'd lightly hit the contacts with some 2000 grit paper but upon looking at the construction and where the relay is, it appears I'll have to take the RF deck apart.

Anything to watch out for underneath? It looks like a lot of work, but I'm into it this far so I might as well go the distance

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11288. Re: [DrakeRadio] R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 02:12:10 UTC
From: Garey Barrell
Topic: 594 Message: 11288

Vic -

Sounds like you have it localized. That first trimmer is the plate circuit of the RF Amp stage. I
would suspect a broken solder connection, or perhaps just a piece of metal around the trimmer, or a
dirty switch contact. I would first tune in the Calibrator on 14.3 (I think that is the alignment
frequency) and then carefully peak the PreSelector. Using a non-metallic tool, rock that first
trimmer cap adjustment around a turn or two in each direction, and then re-peakit.

If still intermittent, carefully inspect the wiring switch contacts and fixed capacitors associated
with that trimmer for shorts and/or solder problems. Also check all the screws in the area for
tightness, if you have already done so. Check all connections around the tube socket (V1), and
DeoxIT the tube pins.

Lemme know!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Victor wrote:
> Garey
> Shortly before Xmas I mentioned that I had a problem with the R-4C. As you will have dealt with hundreds of problems since then I'll refresh your memory.
> The Rx works but suddenly the sensitivity went off on 20m. On 14.000khz I could just hear the calib sig but on 14.025 it was about S5. Go up to 14.050 and it was barely audible. Sigs were the same.
> You suggested checking the pre-select rack which I have now done. All the slugs are sitting comfortably and all the same height - 11/32". Also checked and de-oxed the switching and all the associated wiring seems OK.
> Now we come to the strange bit. On the top chassis there are 4 banks of trimmers and on each bank there is one marked 14.3. If I touch the 14.3 nearest the front panel (just underneath the meter) the 20m band comes back to life and this happens irrespective of what freq I have the PTO set at. A fraction of a turn of the trimmer to the left and the RX is alive and a fraction to the right leaves it deaf - this is on 20m the other bands are OK.
> So, in a word, I'm lost. This is the second time this has happened and each time just

barely touching that trimmer has brought 20m back to life.
>
> Any ideas, please?
> Vic
> G4JSS
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11289. Re: [DrakeRadio] T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 02:39:10 UTC
From: Garey Barrell
Topic: 11286 Message: 11289

Steve -

1. sandpaper not a good idea, even 2000 grit. Anything more than a business card soaked with DeoxIT
is 'TOO much'.

2. Take a look at the relay photo on the CD, the receive contact is right up front and on top,
second from the left.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Sorry - meant T-4XB. No, you're not hallucinating...
>
>

11290. Re: [DrakeRadio] T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 02:54:13 UTC
From: Steve Wedge
Topic: 11286 Message: 11290

What's the name of the file, Garey? I never saw anything that showed the relay.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, January 06, 2013 9:39 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XB Relay Intermittent

Steve -

1. sandpaper not a good idea, even 2000 grit. Anything more than a business card soaked with DeoxIT
is 'TOO much'.

2. Take a look at the relay photo on the CD, the receive contact is right up front and on top,
second from the left.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Steve Wedge wrote:
> Sorry - meant T-4XB. No, you're not hallucinating...
>
>

[Non-text portions of this message have been removed]

11291. Re: [DrakeRadio] T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 03:12:52 UTC
From: Steve Wedge
Topic: 11286 Message: 11291

Found the contact anyway - applied some Cramolin (yes - I still have 3/4 of a bottle of the stuff!) and we seem to be in business.

Thanks for the tip. Removing that deck would have been a PITA.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Wedge
Sent: Sunday, January 06, 2013 9:54 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XB Relay Intermittent

What's the name of the file, Garey? I never saw anything that showed the relay.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, January 06, 2013 9:39 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XB Relay Intermittent

Steve -

1. sandpaper not a good idea, even 2000 grit. Anything more than a business card soaked with DeoxIT
is 'TOO much'.

2. Take a look at the relay photo on the CD, the receive contact is right up front and on top,
second from the left.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Steve Wedge wrote:
> Sorry - meant T-4XB. No, you're not hallucinating...
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11292. Re: [DrakeRadio] T-4XB Relay Intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 14:36:05 UTC
From: Garey Barrell
Topic: 11286 Message: 11292

Steve -

Sorry, I was thinking TR-4. Here's some infothat should help. Keep in mind that the Receive contact will be a 'normally closed' one, and the 'arm' will be grounded. It's the center arm on the
T-4XB.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> What's the name of the file, Garey? I never saw anything that showed the relay.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Sunday, January 06, 2013 9:39 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] T-4XB Relay Intermittent
>
>
>
> Steve -
>
> 1. sandpaper not a good idea, even 2000 grit. Anything more than a business card soaked with DeoxIT
> is 'TOO much'.
>
> 2. Take a look at the relay photo on the CD, the receive contact is right up front and on top,
> second from the left.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Steve Wedge wrote:
>> Sorry - meant T-4XB. No, you're not hallucinating...
>>
>>
>

[Non-text portions of this message have been removed]

11293. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 15:35:44 UTC
From: w6mqi
Topic: 10629 Message: 11293

Well this power fluctuation is proving to be a bugger to find it's now intermittent. V9 checks out ok no fluctuation there, I'm seeing it on the grid of V4, but now I'm at a stand still the power output is rock solid things have decided to work or stop working :-)So here I sit waiting for the power fluctuation to return this could take awhile.

73,Dave

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Dave -
>
> I'm not sure. Looking at the CD, there is a blue stripe on the 'left' side of C102, and that is the
> lead that is tied to R82 and Pin 8 of V9, which is the positive side according to the schematic.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> w6mqi wrote:
> > I'm back to trying to find out why there's power fluctuation only in TUNE on all bands with my T4XC. Pulled out C102 and didn't look to see it's correct placement in the board for polarity so I could put it back correctly. The cap has a black stripe going around it, and on one leg there's a break in the stripe would this be the positive leg? I'm usually pretty good about marking or taking pictures , but this time I got a little a head of myself.
> >
> > Dave
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >> Dave -
> >>
> >> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
> >> have a scope, you could even connect a set of headphones or possibly a small speaker tothe 'output'
> >> end of C102. I'd say it's a likely suspect. You could try a reasonable substitute for C102, a 0.47
> >> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes

through
> >> S1D(r), DeoxIT here.
> >>
> >> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
> >> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
> >> can confirm a clean audio tone on the negative end of C102. IF the audio is 'unsteady', you'll need
> >> to extend your 'listening tour' back to the grid of V9b.
> >>
> >> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
> >> replace it....
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> w6mqi wrote:
> >>> Garey
> >>> If your still around I did some test and part replacements to try and solve my power fluctuation which is not confined to just 40m. I swapped out V9 with several and no change, replaced CR15, and CR19 no change, with transmitter in (CW) power output is rock solid problem is only in (TUNE). I originally thought just 40m as I said earlier, but I know now it's on 15m, and 10m as well any thoughts?
> >>>
> >>> 73,Dave
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >>>> Dave -
> >>>>
> >>>> Easiest, safest place is on the wiper (center terminal) of the CAR BAL pot. Key transmitter in TUNE
> >>>> with GAIN full CCW.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>>
> >>>>
> >>>> w6mqi wrote:
> >>>>> Thanks for putting up with all my neophyte questions Garey my training is not electronics, but construction and aviation figure that combination out! Anyway I have one more question where would be the best place to attach the counter to the CAR OSC to check the freq on the B-line? On the C-line the counter is attached to the CAR OSC jack on the

back of the XMTR.
> >>>>>
> >>>>> Dave
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >>>>>> Dave -
> >>>>>>
> >>>>>> I think this is a result of the sharper filter skirts of the 8 pole filters in the B and C line.
> >>>>>> The problem is that even with the CAR BAL control turned ALL (10 turns) the way one way or another,
> >>>>>> there still isn't enough signal to drive the following stages for RF output from the transmitter.
> >>>>>>
> >>>>>> What you are trying to do is to center the CAR OSC between the two filter passbands, i.e., if you
> >>>>>> visualize the two filter passbands as a letter "M", you want to set the CAR OSC at the bottom of the
> >>>>>> center v of the "M". This 'should be' 5.645 MHz.
> >>>>>>
> >>>>>> One alternative is to just tune T14, 3 and 2 for maximum output as you did,and then set the CAR
> >>>>>> OSCto exactly 5.645000 MHz with an accurate counter.
> >>>>>>
> >>>>>> I do the procedure as specified, except instead of looking for output power, I just put a scope
> >>>>>> probe on the antenna lead. There is plenty of signal this way. then you can also rebalance the BAL
> >>>>>> MOD using this same setup. You can also use the receiver by connecting the receiver antenna to the
> >>>>>> transmitter output via a capacity "T", but obviously if you key the transmitter at full power,
> >>>>>> you'll need a new T1 in the receiver!! :-)
> >>>>>>
> >>>>>> Since you have the transformers peaked, if you have an accurate counter just set the CAR OSC to
> >>>>>> 5.645000 MHz and rebal the BAL MOD.
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>>
> >>>>>>
> >>>>>> w6mqi wrote:
> >>>>>>> Garey
> >>>>>>> Yep this is a strange one a band specific power fluctuation. I think I'll start by checking and cleaning the switch contacts if nothing happens then I'll dig deeper. Since tune up and operation is fine in CW mode I could just let it go and call it fixed hihi.
> >>>>>>> ---

> >>>>>>> A while back I was working on another T4XC of mine which had low power output starting around 15 meters and progressively getting worse on 10 meters (10 watts max output). I went through the unit using the alignment procedures in the manual, and found that procedure 5.9 just would not work per the manual I couldn't get any current movement on the plate meter to adjust T14, T3, and T2. So I gave up and just tweaked T14,T3, and T2 for max power output on the pwr/swr meter attached to the T4XC and behold I now get 100 watts out on all bands now. Garey was this the right way to go about adjusting T14,T3,and T2? or should have I just continued trying the Drake manual way?
> >>>>>>>
> >>>>>>> 73,Dave
> >>>>>>>
> >>>>>>>
> >>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >>>>>>>> Dave -
> >>>>>>>>
> >>>>>>>> Ahhh. Key piece of information. I can't say why it would only present on 40M as there are no 'band
> >>>>>>>> specific' circuits that are different between CW and TUNE.
> >>>>>>>>
> >>>>>>>> Primary difference between TUNE and CW is method of signal generation.
> >>>>>>>>
> >>>>>>>> On CW, the Carrier Oscillator is just shifted into the passband of the LSB filter, the Balanced
> >>>>>>>> Modulator is unbalanced to allow the CO through, and then amplified through the PA and out.
> >>>>>>>>
> >>>>>>>> On SSB (TUNE), V9a is converted to an audio oscillator generating ~1 kHz tone, amplified by V9b, and
> >>>>>>>> coupled by C102 to the Balanced Modulator. Think whistling into the microphone. So... Start by
> >>>>>>>> subbing V9. If not, look at CR15, watch the DC bias on it (should be reverse biased [+ voltage] to
> >>>>>>>> see if it's fluctuating. If not, I'd next look at C102, a 1uF tantalum. If not, a scope would be a
> >>>>>>>> big help. Something is happening to the audio signal from V9 between V9a and the Bal Mod. There are
> >>>>>>>> several switch contactsets between V9 and the Bal Mod that 'could' be a problem, but ...
> >>>>>>>>
> >>>>>>>> 73, Garey - K4OAH
> >>>>>>>> Glen Allen, VA
> >>>>>>>>
> >>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> w6mqi wrote:
> >>>>>>>>> I just checked and the power fluctuation seems to only happen in TUNE not CW.
> >>>>>>>>>
> >>>>>>>>> Dave

> >>>>>>>>>
> >>>>>>>>> --- In DrakeRadio@yahoogroups.com, "w6mqi" wrote:
> >>>>>>>>>> I have a T4XC which has a power fluctuation only on 40 meters all other bands seem okay. As I tune up the T4XC in TUNE I find the plate meter readings very twitchy or jumping around as I try to dip the plate, once tuned I can watch my pwr/swr meter jump a few watts then at times as mush as 10 or 20 watts back a forth. Could this be a indication of Tx power fluctuation caused by CR19 that Ron Baker (WB4HFN) talks about? I may also clean all the rotary switches although they all look real clean.
> >>>>>>>>>>
> >>>>>>>>>> 73,Dave
>

11294. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 15:57:53 UTC
From: Garey Barrell
Topic: 10629 Message: 11294

Dave -

Have you inspected R44 and R45 for condition? Mechanical stability?

73, Garey - K4OAH
Glen Allen, VA

w6mqi wrote:
> Well this power fluctuation is proving to be a bugger to find it's now intermittent. V9 checks out ok no fluctuation there, I'm seeing it on the grid of V4, but now I'm at a stand still the power output is rock solid things have decided to work or stop working :-)So here I sit waiting for the power fluctuation to return this could take awhile.
>
> 73,Dave
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Dave -
>>
>> I'm not sure. Looking at the CD, there is a blue stripe on the 'left' side of C102, and that is the
>> lead that is tied to R82 and Pin 8 of V9, which is the positive side according to the schematic.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>>
>> w6mqi wrote:
>>> I'm back to trying to find out why there's power fluctuation only in TUNE on all bands with my T4XC. Pulled out C102 and didn't look to see it's correct placement in the board for polarity so I could put it back correctly. The cap has a black stripe going around it, and on one leg there's a break in the stripe would this be the positive leg? I'm usually pretty good about marking or taking pictures , but this time I got a little a head of myself.
>>>
>>> Dave
>>>
>>>
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>> Dave -
>>>>
>>>> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
>>>> have a scope, you could even connect a set of headphones or possibly a small speaker tothe 'output'

>>>> end of C102. I'd say it's a likely suspect. You could try a reasonable substitute for C102, a 0.47
>>>> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes through
>>>> S1D(r), DeoxIT here.
>>>>
>>>> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
>>>> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
>>>> can confirm a clean audio tone on the negative end of C102. IF the audio is 'unsteady', you'll need
>>>> to extend your 'listening tour' back to the grid of V9b.
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>>>> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
>>>> replace it....
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>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
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>>>> w6mqi wrote:
>>>>> Garey
>>>>> If your still around I did some test and part replacements to try and solve my power fluctuation which is not confined to just 40m. I swapped out V9 with several and no change, replaced CR15, and CR19 no change, with transmitter in (CW) power output is rock solid problem is only in (TUNE). I originally thought just 40m as I said earlier, but I know now it's on 15m, and 10m as well any thoughts?
>>>>>
>>>>> 73,Dave
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
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clean all the rotary switches although they all look real clean.
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11295. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-07 16:06:07 UTC
From: Dino Papas
Topic: 10629 Message: 11295

Dave - I had a similar problem with my T4XC back in 2001 and it took John Kriner two whacks at it to find the intermittent problem. Here's John's note describing the issue and his fix:

"I initially found the transmitter to work fine. After alignment, I did observe it doing exactly as you described. Then, the problem went away!. I tried poking, proving, tapping, and cursing to no avail. I finally set it aside, and went on to the receiver. Afterwards, I again observed the same symptoms. I traced it to the balanced modulator (T-14). I removed the can and re-soldered the diodes. I also noticed that one point had a long solder "ear," which may have been intermittently shorting to the can when hot."

Don't know if this applies to your situation but just in case thought I'd send it along.

Good luck!

73 - Dino KL0S

On Jan072013, at 1035 AM, w6mqi wrote:

> Well this power fluctuation is proving to be a bugger to find it's now intermittent. V9 checks out ok no fluctuation there, I'm seeing it on the grid of V4, but now I'm at a stand still the power output is rock solid things have decided to work or stop working :-)So here I sit waiting for the power fluctuation to return this could take awhile.
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> > >> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
> > >> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
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[Non-text portions of this message have been removed]

11296. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 00:51:34 UTC
From: w6mqi
Topic: 10629 Message: 11296

Garey
I'll check R44, and R45 tonight. So if there is something wrong inside T-14 i.e. diodes is there any luck repairing these? I do have a spare T4XC that I bought for possible parts swap might be easier?

Dave

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
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> Dave -
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> Have you inspected R44 and R45 for condition? Mechanical stability?
>
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> w6mqi wrote:
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11297. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 02:23:05 UTC
From: Richard Knoppow
Topic: 10629 Message: 11297

----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, January 07, 2013 4:51 PM
Subject: [DrakeRadio] Re: T4XC Power fluctuation

> Garey
> I'll check R44, and R45 tonight. So if there is something
> wrong inside T-14 i.e. diodes is there any luck repairing
> these? I do have a spare T4XC that I bought for possible
> parts swap might be easier?
>
> Dave
>
I've worked on the balanced modulator in a T4XB, I think
they are identical. They are not hard to work on at all. The
can can be removed by compressing the clips with a pair of
pliers. Slip it off and you can see the diodes on the board
at the top. A careful inspection should turn up any whiskers
shorting to the can or loose leads. Actually, if there is
an intermittent short in it you should be able to see it by
just tapping on the can.
I got pretty deeply into the balanced modulator because
I could not get a carrier balance on mine. It turned out
someone had switched two leads under the chassis. They
looked OK but were wrong and the change in stray
capacitance prevented the carrier from nulling correctly. I
spotted this after long struggle when I got Garrey's disc
and looked closely at the photographs in it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11298. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 03:09:11 UTC
From: Garey Barrell
Topic: 10629 Message: 11298

Dave -

OK. Yes, I mentioned the diode possibility a message or two back. Really pretty rare, I've only
seen one case. With care you can get the can off without removing any wiring. The one I saw all I
had to do was push in on the diode lead that was sticking out a little too far and touching the
can. It doesn't take much clearance.

Besure and check the switch wiring for R45. It's supposed to be in circuit in TUNE and shorted in
other modes. It limits screen current in the PA to protect the PA tubes in while tuning.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Yahoo! Groups Links
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11299. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 04:53:48 UTC
From: w6mqi
Topic: 10629 Message: 11299

Garey, and everyone else.
I checked out the resistors you mentioned all checked out ok, but I gotta say R45 if it were bad it would be the resistor from hell to replace. I went through tightening ground nuts and screws and found some loose ones, and the screws holding S-4H(F),S-4G(F) to the sheet metal plate were very loose. I don't know if I broke it or not while trying to tighten S-4H mounting screws , but I found R50 broken in two
so I replaced it. Well so far I can't get the T4XC power to fluctuate things seem to be working so far. My next issue is the R4C I'll start another post on that one later.

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> OK. Yes, I mentioned the diode possibility a message or two back. Really pretty rare, I've only
> seen one case. With care you can get the can off without removing any wiring. The one I saw all I
> had to do was push in on the diode lead that was sticking out a little too far and touching the
> can. It doesn't take much clearance.
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> Besure and check the switch wiring for R45. It's supposed to be in circuit in TUNE and shorted in
> other modes. It limits screen current in the PA to protect the PA tubes in while tuning.
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11300. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 05:18:22 UTC
From: Richard Knoppow
Topic: 10629 Message: 11300

```
----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, January 07, 2013 8:53 PM
Subject: [DrakeRadio] Re: T4XC Power fluctuation

> Garey, and everyone else.
> I checked out the resistors you mentioned all checked out
> ok, but I gotta say R45 if it were bad it would be the
> resistor from hell to replace. I went through tightening
> ground nuts and screws and found some loose ones, and the
> screws holding S-4H(F),S-4G(F) to the sheet metal plate
> were very loose. I don't know if I broke it or not while
> trying to tighten S-4H mounting screws , but I found R50
> broken in two
> so I replaced it. Well so far I can't get the T4XC power
> to fluctuate things seem to be working so far. My next
> issue is the R4C I'll start another post on that one
> later.
>
> 73,Dave
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Thats only the screen resistor for one tube. I'll bet
that made a difference:-) I've seen resistors that cracked
but were still making contact. Very intermittent and heat
sensitive. Might very well be the answer. Congratulations
on spotting it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

11301. Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 06:24:33 UTC
From: w6mqi
Topic: 10629 Message: 11301

Richard
Thanks will see I'm not putting the covers on just yet I think I'll leave the units on the bench for awhile and see what happens. Never fails as soon as one goes to put the rigs back together it decides to start acting up again hihi.

73,Dave

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
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> From: "w6mqi"
> To:
> Sent: Monday, January 07, 2013 8:53 PM
> Subject: [DrakeRadio] Re: T4XC Power fluctuation
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>
> --
> Richard Knoppow
> Los Angeles

> WB6KBL
> dickburk@...
>

11302. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 07:28:05 UTC
From: Richard Knoppow
Topic: 10629 Message: 11302

```
----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, January 07, 2013 10:24 PM
Subject: [DrakeRadio] Re: T4XC Power fluctuation

> Richard
> Thanks will see I'm not putting the covers on just yet I
> think I'll leave the units on the bench for awhile and see
> what happens. Never fails as soon as one goes to put the
> rigs back together it decides to start acting up again
> hihi.
>
> 73,Dave

FWIW, I don't think you broke the resistor. They are a
lot harder to snap they look. I suspect this was from years
of stress, probably heat stress. I've seen a lot of
resistors that _looked_ fine but came apart when wiggled.
One trick I learned long ago was to wiggle wires. Either
with needle nosed pliers or some sort of insulated stick
(chop sticks are handy). You can find all sorts of things.
I found a wire in one of my Drakes that had _never_ been
soldered. Also found this in a General Radio instrument.
When wires are wrapped before soldering they sometimes make
good enough contact to last for years without the solder.
Another thing I learned, this time at -hp- where it was
a rule: if you spend some time on something and can't spot a
problem get someone else to look. Its surprising how often
your eye can pass right over something obvious that someone
else will see instantly.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

11303. Re: [DrakeRadio] Re: T4XC Power fluctuation

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-08 14:02:06 UTC
From: Garey Barrell
Topic: 10629 Message: 11303

Dave -

OK. It's a process of elimination. ! A cracked R50 could certainly cause power fluctuations, so
perhaps you fell over it! That happens more often than the 'experts' like to admit.....

I've got several of these projects going at the moment, and sometimes they run together. I think I
told you to check R50 - R54 for value and condition, those are the culprits that can be damaged when
one or more PA tubes weaken or fail outright. They are 'first steps' in any new transmitter overhaul.

Hopefully you got it! On to the R-4C.... :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> seen one case. With care you can get the can off without removing any wiring. The one I saw all I
>> had to do was push in on the diode lead that was sticking out a little too far and touching the
>> can. It doesn't take much clearance.
>>

>> Besure and check the switch wiring for R45. It's supposed to be in circuit in TUNE and shorted in
>> other modes. It limits screen current in the PA to protect the PA tubes in while tuning.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> w6mqi wrote:
>>> Garey
>>> I'll check R44, and R45 tonight. So if there is something wrong inside T-14 i.e. diodes is there any luck repairing these? I do have a spare T4XC that I bought for possible parts swap might be easier?
>>>
>>> Dave
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>> Dave -
>>>>
>>>> Have you inspected R44 and R45 for condition? Mechanical stability?
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>>
>>>> w6mqi wrote:
>>>>> Well this power fluctuation is proving to be a bugger to find it's now intermittent. V9 checks out ok no fluctuation there, I'm seeing it on the grid of V4, but now I'm at a stand still the power output is rock solid things have decided to work or stop working :-)So here I sit waiting for the power fluctuation to return this could take awhile.
>>>>>
>>>>> 73,Dave
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>>>> Dave -
>>>>>>
>>>>>> I'm not sure. Looking at the CD, there is a blue stripe on the 'left' side of C102, and that is the
>>>>>> lead that is tied to R82 and Pin 8 of V9, which is the positive side according to the schematic.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>>
>>>>>> w6mqi wrote:
>>>>>>> I'm back to trying to find out why there's power fluctuation only in TUNE on all

bands with my T4XC. Pulled out C102 and didn't look to see it's correct placement in the board for polarity so I could put it back correctly. The cap has a black stripe going around it, and on one leg there's a break in the stripe would this be the positive leg? I'm usually pretty good about marking or taking pictures , but this time I got a little a head of myself.
>>>>>>>
>>>>>>> Dave
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>>>>>> Dave -
>>>>>>>>
>>>>>>>> All bands certainly makes more sense. You don't address C102 in your reply below. If you don't
>>>>>>>> have a scope, you could even connect a set of headphones or possibly a small speaker tothe 'output'
>>>>>>>> end of C102. I'd say it's a likely suspect. You could try a reasonable substitute for C102, a 0.47
>>>>>>>> uF, even a 0.1 uF cap, any voltage, film cap for test purposes. This signal also goes through
>>>>>>>> S1D(r), DeoxIT here.
>>>>>>>>
>>>>>>>> A less likely suspect would be diode(s) inside the Bal Mod can. There have been instances where
>>>>>>>> these short to the can and or develop leakage that presents as 'noise'. This is only pursued IF we
>>>>>>>> can confirm a clean audio tone on the negative end of C102. IF the audio is 'unsteady', you'll need
>>>>>>>> to extend your 'listening tour' back to the grid of V9b.
>>>>>>>>
>>>>>>>> Rather than just 'shotgun' parts, it's much better to try and isolate the defective one, and then
>>>>>>>> replace it....
>>>>>>>>
>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>>
>>>>>>>> w6mqi wrote:
>>>>>>>>> Garey
>>>>>>>>> If your still around I did some test and part replacements to try and solve my power fluctuation which is not confined to just 40m. I swapped out V9 with several and no change, replaced CR15, and CR19 no change, with transmitter in (CW) power output is rock solid problem is only in (TUNE). I originally thought just 40m as I said earlier, but I know now it's on 15m, and 10m as well any thoughts?
>>>>>>>>>
>>>>>>>>> 73,Dave
>>>>>>>>>
>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>>>>>>>> Dave -

>>>>>>>>>>
>>>>>>>>>> Easiest, safest place is on the wiper (center terminal) of the CAR BAL pot. Key transmitter in TUNE
>>>>>>>>>> with GAIN full CCW.
>>>>>>>>>>
>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> w6mqi wrote:
>>>>>>>>>>> Thanks for putting up with all my neophyte questions Garey my training is not electronics, but construction and aviation figure that combination out! Anyway I have one more question where would be the best place to attach the counter to the CAR OSC to check the freq on the B-line? On the C-line the counter is attached to the CAR OSC jack on the back of the XMTR.
>>>>>>>>>>>
>>>>>>>>>>> Dave
>>>>>>>>>>>
>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>>>>>>>>>> Dave -
>>>>>>>>>>>>
>>>>>>>>>>>> I think this is a result of the sharper filter skirts of the 8 pole filters in the B and C line.
>>>>>>>>>>>> The problem is that even with the CAR BAL control turned ALL (10 turns) the way one way or another,
>>>>>>>>>>>> there still isn't enough signal to drive the following stages for RF output from the transmitter.
>>>>>>>>>>>>
>>>>>>>>>>>> What you are trying to do is to center the CAR OSC between the two filter passbands, i.e., if you
>>>>>>>>>>>> visualize the two filter passbands as a letter "M", you want to set the CAR OSC at the bottom of the
>>>>>>>>>>>> center v of the "M". This 'should be' 5.645 MHz.
>>>>>>>>>>>>
>>>>>>>>>>>> One alternative is to just tune T14, 3 and 2 for maximum output as you did,and then set the CAR
>>>>>>>>>>>> OSCto exactly 5.645000 MHz with an accurate counter.
>>>>>>>>>>>>
>>>>>>>>>>>> I do the procedure as specified, except instead of looking for output power, I just put a scope
>>>>>>>>>>>> probe on the antenna lead. There is plenty of signal this way. then you can also rebalance the BAL
>>>>>>>>>>>> MOD using this same setup. You can also use the receiver by connecting the receiver antenna to the
>>>>>>>>>>>> transmitter output via a capacity "T", but obviously if you key the transmitter at full power,
>>>>>>>>>>>> you'll need a new T1 in the receiver!! :-)
>>>>>>>>>>>>
>>>>>>>>>>>> Since you have the transformers peaked, if you have an accurate counter just set the CAR OSC to

>>>>>>>>>>>> 5.645000 MHz and rebal the BAL MOD.
>>>>>>>>>>>>
>>>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>>>
>>>>>>>>>>>>
>>>>>>>>>>>> w6mqi wrote:
>>>>>>>>>>>>> Garey
>>>>>>>>>>>>> Yep this is a strange one a band specific power fluctuation. I think I'll start by checking and cleaning the switch contacts if nothing happens then I'll dig deeper. Since tune up and operation is fine in CW mode I could just let it go and call it fixed hihi.
>>>>>>>>>>>>> ---
>>>>>>>>>>>>> A while back I was working on another T4XC of mine which had low power output starting around 15 meters and progressively getting worse on 10 meters (10 watts max output). I went through the unit using the alignment procedures in the manual, and found that procedure 5.9 just would not work per the manual I couldn't get any current movement on the plate meter to adjust T14, T3, and T2. So I gave up and just tweaked T14,T3, and T2 for max power output on the pwr/swr meter attached to the T4XC and behold I now get 100 watts out on all bands now. Garey was this the right way to go about adjusting T14,T3,and T2? or should have I just continued trying the Drake manual way?
>>>>>>>>>>>>>
>>>>>>>>>>>>> 73,Dave
>>>>>>>>>>>>>
>>>>>>>>>>>>>
>>>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>>>>>>>>>>>>>> Dave -
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> Ahhh. Key piece of information. I can't say why it would only present on 40M as there are no 'band
>>>>>>>>>>>>>> specific' circuits that are different between CW and TUNE.
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> Primary difference between TUNE and CW is method of signal generation.
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> On CW, the Carrier Oscillator is just shifted into the passband of the LSB filter, the Balanced
>>>>>>>>>>>>>> Modulator is unbalanced to allow the CO through, and then amplified through the PA and out.
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> On SSB (TUNE), V9a is converted to an audio oscillator generating ~1 kHz tone, amplified by V9b, and
>>>>>>>>>>>>>> coupled by C102 to the Balanced Modulator. Think whistling into the microphone. So... Start by
>>>>>>>>>>>>>> subbing V9. If not, look at CR15, watch the DC bias on it (should be reverse biased [+ voltage] to
>>>>>>>>>>>>>> see if it's fluctuating. If not, I'd next look at C102, a 1uF tantalum. If not, a scope would be a
>>>>>>>>>>>>>> big help. Something is happening to the audio signal from V9 between V9a and the Bal Mod. There are
>>>>>>>>>>>>>> several switch contactsets between V9 and the Bal Mod that 'could' be a

problem, but ...
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>>
>>>>>>>>>>>>>> w6mqi wrote:
>>>>>>>>>>>>>>> I just checked and the power fluctuation seems to only happen in TUNE not CW.
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> Dave
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, "w6mqi" wrote:
>>>>>>>>>>>>>>>> I have a T4XC which has a power fluctuation only on 40 meters all other bands seem okay. As I tune up the T4XC in TUNE I find the plate meter readings very twitchy or jumping around as I try to dip the plate, once tuned I can watch my pwr/swr meter jump a few watts then at times as mush as 10 or 20 watts back a forth. Could this be a indication of Tx power fluctuation caused by CR19 that Ron Baker (WB4HFN) talks about? I may also clean all the rotary switches although they all look real clean.
>>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>>> 73,Dave
>>>
>>>
>>> ------------------------------------
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>>> Yahoo! Groups Links
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> ------------------------------------
>
> Yahoo! Groups Links
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>

11304. FS Late AC-4 with 120/240 switch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 00:50:42 UTC
From: Steve Wedge
Topic: 11304 Message: 11304

Excellent condition, late s/n (57389) Drake AC-4. This is a rare version of the AC-4 that has a 120/240V AC Input switch and factory 3-wire AC cord.

I figure this supply will especially appeal to folks where 220 - 240VAC is the normal mains power, so I will ship international. I won't be able to sell to some countries so please ask and I will research.

Shipping extra - shipping weight will be 20 lbs and the power supply in its original factory box will be shipped in another 14 x 14 x 14" box. I've factored the shipping materials into the price but not the shipping, which will vary.

Email me for the price and particulars. There will be a surcharge for PayPal, and I will take checks and trust our folks here enough that I will ship on receipt of payment. Pics available upon request.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

11305. Re: [DrakeRadio] FS Late AC-4 with 120/240 switch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 19:50:48 UTC
From: Robert Logan
Topic: 11304 Message: 11305

Steve, how much you asking? I live in Manor, TX. Thanks, Bob, NZ5A

Sent from my iPhone

On Jan 8, 2013, at 6:50 PM, "Steve Wedge" <w1es1982@triad.rr.com> wrote:

Excellent condition, late s/n (57389) Drake AC-4. This is a rare version of the AC-4 that has a 120/240V AC Input switch and factory 3-wire AC cord.

I figure this supply will especially appeal to folks where 220 - 240VAC is the normal mains power, so I will ship international. I won't be able to sell to some countries so please ask and I will research.

Shipping extra - shipping weight will be 20 lbs and the power supply in its original factory box will be shipped in another 14 x 14 x 14" box. I've factored the shipping materials into the price but not the shipping, which will vary.

Email me for the price and particulars. There will be a surcharge for PayPal, and I will take checks and trust our folks here enough that I will ship on receipt of payment. Pics available upon request.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11306. Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 20:53:42 UTC
From: w5ida
Topic: 11306 Message: 11306

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

11307. Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 21:36:28 UTC
From: Allen Turner
Topic: 11306 Message: 11307

John, I have two saved on my computer I can try and send you. One is about 2MB and the other is 10MB. You will want both as one is easy to read and very good photos but the schematic is in 3 parts. The other is also easy to read but the photos are poor but the schematic is on one page whicj is handy. I'm not sure how large an attachment I can send, but I can send one at a time for you.

Al, n7ioh
Payson, Arizona, USA

----- Original Message -----
From: w5ida
Sent: 01/09/13 02:53 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

[Non-text portions of this message have been removed]

11308. Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 22:21:16 UTC
From: Allen Turner
Topic: 11306 Message: 11308

To the group. I think I got one from mods.dk and the other from WB4HFN'S manual page.
http://www.mods.dk/
http://www.wb4hfn.com/DRAKE/DrakeManuals.htm

Al, n7ioh
Payson, Arizona, USA

----- Original Message -----
From: Allen Turner
Sent: 01/09/13 03:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

John, I have two saved on my computer I can try and send you. One is about 2MB and the other is 10MB. You will want both as one is easy to read and very good photos but the schematic is in 3 parts. The other is also easy to read but the photos are poor but the schematic is on one page whicj is handy. I'm not sure how large an attachment I can send, but I can send one at a time for you.

Al, n7ioh
Payson, Arizona, USA

----- Original Message -----
From: w5ida
Sent: 01/09/13 02:53 PM
To: DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

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[Non-text portions of this message have been removed]

11309. Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 22:27:18 UTC
From: Dan Galligan
Topic: 11306 Message: 11309

Here's one, from a FREE site, that won't give you any hassles, like Erik at mods dot dk.

http://boxspringsonline.com/drake/1283-sw-4amanual

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

----- Original Message -----
From: w5ida
Sent: 01/09/13 02:53 PM
To: DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

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[Non-text portions of this message have been removed]

Yahoo! Groups Links

11310. Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 22:31:11 UTC
From: Dan Galligan
Topic: 11306 Message: 11310

FYI,
On that website, we have 185 DRAKE manuals/documents available, for free, plus thousands of others, for most other brands. We're still building our inventory of manuals and schematics. If you ever want to send any to me, I will get them to Gary, who operates the website, and will happily make them available, for all.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

On Jan 9, 2013, at 2:27 PM, Dan Galligan <w3rxo@...> wrote:

Here's one, from a FREE site, that won't give you any hassles, like Erik at mods dot dk.

http://boxspringsonline.com/drake/1283-sw-4amanual

73,
Dan
W3RXO/W6
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Real Radios Glow in the dark, and have LETHAL voltages!!!
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Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

----- Original Message -----
From: w5ida
Sent: 01/09/13 02:53 PM
To: DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

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[Non-text portions of this message have been removed]

Yahoo! Groups Links

Yahoo! Groups Links

11311. Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-09 22:48:01 UTC
From: Tom
Topic: 8812 Message: 11311

I know it has been quite a while since I posted this topic but the problem is still there. I have determined that the problem is not in the function switch (I think). I will try again to describe the problem. When I first turn the transmitter on the output is very low. I turn the function switch to the x-cw position and back to tune and power output comes up. Over time it drifts down very slowly. If I rotate the switch a couple of times it comes back to full power. Then starts the slow drift back down. It acts as if something (cap?) is discharging. I have cleaned and rotated the switch many, many times. That's why I figure the problem is somewhere else. Don't get much use out of the rig brcause of this. Sure would like to make some progress so I will welcome any suggestions. Full output is around 120 watts and it drifts down to around 30 watts over time. HELP!! Thanks in advance.....Tom

--- In DrakeRadio@yahoogroups.com, "Tom" wrote:
>
> Thanks Richard...We used to use a compound on high voltage connections that I think was call "No Al-Ox" or something similar to that. Mostly where aluminum wire was connected to any sort of copper. Sounds very much like what you bare referring to. Again..thanks to all. I at least now know where to go if and when the problem crops up.
>
> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@> wrote:
> >
> >
> > ----- Original Message -----
> > From: "Tom"
> > To:
> > Sent: Wednesday, August 01, 2012 11:52 AM
> > Subject: [DrakeRadio] Re: T4XB Low Output
> >
> >
> > > Thanks very much for the replies. I cleaned the function
> > > switch contacts the best I could and got the output up to
> > > 120 watts. The next time I put it in tune, the output was
> > > low again. Rock the switch and it comes back. Either I
> > > have to clean it better or the contacts are shot. I think
> > > I can probably work it out with a couple more cleanings.
> > > I'm using regular contact cleaner. I should get some
> > > DeOxit. I have never used it but seems to be the experts
> > > choice. Thanks again...Tom
> > >
> >
> > Don't trust the switch contacts to stay clean. Deoxit
> > can work for a time but the pollutants in the air that
> > corrode switch contacts is always there especially in
> > cities. Caig Labs says that treating contacts with Deoxit
> > Gold after cleaning with regular Deoxit will protect them.
> > I have not tried this yet. However, I've had good success

> > with Tuner-Lub, a light grease meant originally for TV
> > tuners. I clean with Deoxit and when its evaporated put a
> > little Tuner-Lub on with a toothpick or similar tool. I've
> > treated switches that got flaky in a few days after cleaning
> > with this stuff and it seems to prevent oxidation for months
> > at least. I suspect that even Vaseline will work. Vaseline
> > used to be the standard for treating contacts on bridges and
> > resistance boxes, etc. Vaseline and Tuner-Lub seem to be
> > non-conducting and are easily cleaned off with naphtha.
> > FWIW, the band switch in my TR-4 was persistently
> > intermittent, not working at all on some bands until I
> > cleaned the decks with Deoxit but would become intermittent
> > again after a couple of days. Tuner-Lub after cleaning
> > fixed this.
> > I think this also has to do with the amount of pressure
> > the spring contacts put on the wiper. I suspect its too low
> > for the wiping action to be consistent in some switches. I
> > don't have a fix for this other than perhaps replacing the
> > switches but the above method seems to work at least for a
> > reasonable time.
> >
> >
> > --
> > Richard Knoppow
> > Los Angeles
> > WB6KBL
> > dickburk@
> >
>

11312. Re: [DrakeRadio] Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 00:28:09 UTC
From: Al Parker
Topic: 8812 Message: 11312

Hi Tom,
I haven't been following your earlier thread, but see that it maybe
focused on switch cleanliness.
I'd check the dropping resistor in the line to the driver's plate, it's
R-44 on the T4-XC, maybe same nr in the B. It may have drifted high in
value and gotten more sensitive to heat, making it go higher. Similar
on the screen resistor there, R-43. I've had that plate resistor cause
a reduction in power in some that I've worked on.
Also, I have the following in my archives, from K9JU in Nov. 2010:
==========
I've mentioned this before, rather recently, but check CR19 in the
cathode circuit of the driver, V4 (12BY7). I have 2 T-4XC transmitters
that exhibited sudden drop (to nothing in both cases) in power output.
Both had CR19 with cracks in the cases. The diodes would appear OK with
a DMM (diode mode) but with the application of heat would open up. Maybe
there's some intermediate mode that would allow moderate output power
but that doesn't seem to make too much sense. Most semiconductors work
or they don't work, in my experience!
A 1N4003 and up is good substitute for the B5G5 diode used by Drake.
Bob K9JU
==========

I hope this will be a help to you.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 1/9/2013 5:48 PM, Tom wrote:
> I know it has been quite a while since I posted this topic but the
> problem is still there. I have determined that the problem is not in the
> function switch (I think). I will try again to describe the problem.
> When I first turn the transmitter on the output is very low. I turn the
> function switch to the x-cw position and back to tune and power output
> comes up. Over time it drifts down very slowly. If I rotate the switch a
> couple of times it comes back to full power. Then starts the slow drift
> back down. It acts as if something (cap?) is discharging. I have cleaned
> and rotated the switch many, many times. That's why I figure the problem
> is somewhere else. Don't get much use out of the rig brcause of this.
> Sure would like to make some progress so I will welcome any suggestions.
> Full output is around 120 watts and it drifts down to around 30 watts

> over time. HELP!! Thanks in advance.....Tom
>

11313. Re: [DrakeRadio] Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 01:46:56 UTC
From: Garey Barrell
Topic: 8812 Message: 11313

Tom -

How long does it take to drift back down??

73, Garey - K4OAH
Glen Allen, VA
Drake Service Supplement CDs for
2-B, 2-C/NT, A, B and C-Line,
TR-4 and TR-4C

Tom wrote:
> I know it has been quite a while since I posted this topic but the problem is still there. I have determined that the problem is not in the function switch (I think). I will try again to describe the problem. When I first turn the transmitter on the output is very low. I turn the function switch to the x-cw position and back to tune and power output comes up. Over time it drifts down very slowly. If I rotate the switch a couple of times it comes back to full power. Then starts the slow drift back down. It acts as if something (cap?) is discharging. I have cleaned and rotated the switch many, many times. That's why I figure the problem is somewhere else. Don't get much use out of the rig brcause of this. Sure would like to make some progress so I will welcome any suggestions. Full output is around 120 watts and it drifts down to around 30 watts over time. HELP!! Thanks in advance.....Tom
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>>> To:
>>> Sent: Wednesday, August 01, 2012 11:52 AM
>>> Subject: [DrakeRadio] Re: T4XB Low Output
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>>>
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>>>> 120 watts. The next time I put it in tune, the output was
>>>> low again. Rock the switch and it comes back. Either I
>>>> have to clean it better or the contacts are shot. I think
>>>> I can probably work it out with a couple more cleanings.
>>>> I'm using regular contact cleaner. I should get some
>>>> DeOxit. I have never used it but seems to be the experts

>>>> choice. Thanks again...Tom
>>>>
>>> Don't trust the switch contacts to stay clean. Deoxit
>>> can work for a time but the pollutants in the air that
>>> corrode switch contacts is always there especially in
>>> cities. Caig Labs says that treating contacts with Deoxit
>>> Gold after cleaning with regular Deoxit will protect them.
>>> I have not tried this yet. However, I've had good success
>>> with Tuner-Lub, a light grease meant originally for TV
>>> tuners. I clean with Deoxit and when its evaporated put a
>>> little Tuner-Lub on with a toothpick or similar tool. I've
>>> treated switches that got flaky in a few days after cleaning
>>> with this stuff and it seems to prevent oxidation for months
>>> at least. I suspect that even Vaseline will work. Vaseline
>>> used to be the standard for treating contacts on bridges and
>>> resistance boxes, etc. Vaseline and Tuner-Lub seem to be
>>> non-conducting and are easily cleaned off with naphtha.
>>> FWIW, the band switch in my TR-4 was persistently
>>> intermittent, not working at all on some bands until I
>>> cleaned the decks with Deoxit but would become intermittent
>>> again after a couple of days. Tuner-Lub after cleaning
>>> fixed this.
>>> I think this also has to do with the amount of pressure
>>> the spring contacts put on the wiper. I suspect its too low
>>> for the wiping action to be consistent in some switches. I
>>> don't have a fix for this other than perhaps replacing the
>>> switches but the above method seems to work at least for a
>>> reasonable time.
>>>
>>>
>>> --
>>> Richard Knoppow
>>> Los Angeles
>>> WB6KBL
>>> dickburk@
>>>
>
>
>
> ------------------------------------
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> Yahoo! Groups Links
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11314. RE: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 16:14:06 UTC
From: John King
Topic: 11306 Message: 11314

Thanks to all who helped me find an SW-4A manual yesterday, and especially Allen, N7IOH who provided me with the schematic.

John, W5IDA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Wednesday, January 09, 2013 5:27 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Here's one, from a FREE site, that won't give you any hassles, like Erik at mods dot dk.

http://boxspringsonline.com/drake/1283-sw-4amanual

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

----- Original Message -----
From: w5ida
Sent: 01/09/13 02:53 PM
To: DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Need an SW-4A schematic and alignment instructions

Hi all,

I'm trying to resurrect a Drake SW-4A short wave receiver. It would be very helpful if I could get a copy of a manual showing a receiver schematic and alignment instructions. BAMA and similar sites don't seem to have any helpful material on this receiver.

Any help from the members of this group will be greatly appreciated.

Thanks in advance.

John, W5IDA

[Non-text portions of this message have been removed]

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Yahoo! Groups Links

[Non-text portions of this message have been removed]

11315. Drake SW2 Schenatic Needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 17:11:20 UTC
From: maxyhopy
Topic: 11315 Message: 11315

I am having a very difficult time trying to find any service info for my fathers SW2. If anyone has copies of the schematic or a pdf please contact me. Appreciate your help.

11316. Re: [DrakeRadio] Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 17:15:52 UTC
From: Garey Barrell
Topic: 8812 Message: 11316

Tom -

How long does it take to drift back down??

73, Garey - K4OAH
Glen Allen, VA
Drake Service Supplement CDs for
2-B, 2-C/NT, A, B and C-Line,
TR-4 and TR-4C

>>> From: "Tom"
>>> To:
>>> Sent: Wednesday, August 01, 2012 11:52 AM
>>> Subject: [DrakeRadio] Re: T4XB Low Output
>>>
>>>
>>>> Thanks very much for the replies. I cleaned the function
>>>> switch contacts the best I could and got the output up to
>>>> 120 watts. The next time I put it in tune, the output was
>>>> low again. Rock the switch and it comes back. Either I
>>>> have to clean it better or the contacts are shot. I think
>>>> I can probably work it out with a couple more cleanings.
>>>> I'm using regular contact cleaner. I should get some
>>>> DeOxit. I have never used it but seems to be the experts
>>>> choice. Thanks again...Tom
>>>>

11317. Re: [DrakeRadio] Drake SW2 Schenatic Needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-10 17:33:54 UTC
From: Dan Galligan
Topic: 11315 Message: 11317

Try here:
http://www.boxspringsonline.com/drake?start=60

Dan

In tough economic times, like we are currently experiencing, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Abe Lincoln may have made men free, but Col. Sam Colt made them all equal.

Sent from my relatively bright, electronic leash.

On Jan 10, 2013, at 9:11, maxyhopy <fsphotos@...> wrote:

I am having a very difficult time trying to find any service info for my fathers SW2. If anyone has copies of the schematic or a pdf please contact me. Appreciate your help.

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11318. Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-11 03:30:48 UTC
From: matt.newman10
Topic: 11318 Message: 11318

I need to replace the original 3-part electrolytic "can" capacitor on the main chassis of my Drake TR-4 transceiver. This particular TR-4 was manufactured in late 1966 (s/n 26104). The 3-part capacitor is a gold colored cardboard "can" located to the right of the VFO as viewed from the front. It's about 3-1/8 inches high and 1-1/8 inch wide. The markings are as follows:

CDE
CC0167A
50 to 80 MFD 250 W.V.
50 to 80 MFD 250 W.V.
30 to 40 MFD 250 W.V.
UPN 10682
AK

Can anyone recommend a new aluminum "can" replacement, or individual electrolytics as a replacement?

Also, does anyone know the capacitor numbers for these three electrolytics? I'm having difficulty locating them on the schematic.

Many thanks, Matt

11319. Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-11 04:31:55 UTC
From: Garey Barrell
Topic: 11318 Message: 11319

Matt -

<www.hayseedhamfest.com>

Tom has a direct replacement.

Your TR-4 is a Version 3 of 8 total. That capacitor is C145A, B and C.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

matt.newman10 wrote:
> I need to replace the original 3-part electrolytic "can" capacitor on the main chassis of my Drake TR-4 transceiver. This particular TR-4 was manufactured in late 1966 (s/n 26104). The 3-part capacitor is a gold colored cardboard "can" located to the right of the VFO as viewed from the front. It's about 3-1/8 inches high and 1-1/8 inch wide. The markings are as follows:
>
> CDE
> CC0167A
> 50 to 80 MFD 250 W.V.
> 50 to 80 MFD 250 W.V.
> 30 to 40 MFD 250 W.V.
> UPN 10682
> AK
>
> Can anyone recommend a new aluminum "can" replacement, or individual electrolytics as a replacement?
>
> Also, does anyone know the capacitor numbers for these three electrolytics? I'm having difficulty locating them on the schematic.
>
> Many thanks, Matt
>

11320. Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-11 05:15:06 UTC
From: Jim Shorney
Topic: 11318 Message: 11320

http://hayseedhamfest.com/cartview.html?id=26

On Fri, 11 Jan 2013 03:30:48 -0000, matt.newman10 wrote:

>I need to replace the original 3-part electrolytic "can" capacitor on the main chassis of my Drake TR-4 transceiver. This particular TR-4 was manufactured in late 1966 (s/n 26104). The 3-part capacitor is a gold colored cardboard "can" located to the right of the VFO as viewed from the front. It's about 3-1/8 inches high and 1-1/8 inch wide. The markings are as follows:
>
>CDE
>CC0167A
>50 to 80 MFD 250 W.V.
>50 to 80 MFD 250 W.V.
>30 to 40 MFD 250 W.V.
>UPN 10682
>AK
>
>Can anyone recommend a new aluminum "can" replacement, or individual electrolytics as a replacement?
>
>Also, does anyone know the capacitor numbers for these three electrolytics? I'm having difficulty locating them on the schematic.
>
>Many thanks, Matt
>
>

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

11321. Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-11 07:14:50 UTC
From: Don Cunningham
Topic: 11318 Message: 11321

Matt,

"Tom" in Garey's email is the owner of Hayseed Hamfest and provides nice, new multi copacitor cans for Drake gear (and others). Go to www.hayseedhamfest.com and you will see either just the multicapacitor can or a whole kit of replacement capacitors for your TR4. I've used a lot of Tom's capacitors and have been pleased with all. The capacitors will be shown on the schematic with an A, B and C after the designator. I don't have my TR4 schematic handy this late, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11322. Re: T4XC Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 02:13:21 UTC
From: Garey Barrell
Topic: 6245 Message: 11322

Dick -

Keep us posted!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Hanna wrote:
> Thanks Gary for the quick reply. Well, I found a couple things. The output of the driver was 5645
> khz! I went to check the output of the PreMixer (6EJ7) and accidentally hit the switch on my
> counter making it low impedance, and when I connected to the plate of the 6EJ7, R114 let all the
> smoke out! I did check the 6EJ7 on my TV& tube tested and the output is really bad. Had a spare,
> so checked it and plugged it into the radio.
> So, I think I will give up for the day...I've been messing with it most of the day. I will replace
> the resistor probably Monday, and go back at it, but sounds like you are on the right track. I
> think I will check the continuity through the transformers while I am at it, and start again, but
> made more progress in the last hour that the last year (Hi!) And...I learned a little more how
> this thing works.
> Thanks again...will get back to you with what I find.
> Dick
> K3VYY
>
> *From:* Garey Barrell <k4oah@...>
> *To:* Richard Hanna <k3vyy@...>
> *Sent:* Friday, January 11, 2013 2:34 PM
> *Subject:* Re: T4XC Problem
>
> Hi Dick -
>
> That's definitely low on the CO, but I don't think that's where the problem lies.
>
> I have several of these 'projects' going a the moment, so forgive me if I repeat. We have the CO
> on frequency, we have the BAND oscillator on frequency so far as weknow. We're working on

40M, so
> if the PTO is set to 0.000, we should have 12.645 MHz at C29 on T3's secondary. This is the
> PreMixer signal, and is derived from the BAND osc at 18.1 MHz and the PTO at 5.455 MHz.
>
> The fact that the RF TUNE is peaking well below 40M leads me to Figure 3-2 of the manual. The
> curves here show that 'well below' the 40M band segment on the 40M band is in the range of 5.645
> MHz. What happens here is that if the PreMixer (12.645 MHz) is NOT present, then the Carrier Osc
> signal at 5.645 MHzis what you're peaking on. So check that the PreMixer (V8) DOES have output at
> 12.645 MHz, and that it is present at C29.
>
> You should have a clean 7.000 MHz signal at the PLATE of V3 (at least 6 V p-p.) Ensure that your
> PLATE trimmer cap of V3 is peaked on 7.000 and NOT 5.645 MHz! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <http://www.k4oah.com/>
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11323. RE: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 02:53:48 UTC
From: Matt Newman
Topic: 11318 Message: 11323

Don,

Many thanks for your quick and informative reply. It did the trick.
Thanks!

I've been in touch with Tom at http://www.hayseedhamfest.com/. He has the
re-cap kit I need.

73,

Matt, VA3MGN / AA1VN

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
Behalf Of Don Cunningham
Sent: Friday, January 11, 2013 2:15 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor
on the TR-4 main chassis

Matt,

"Tom" in Garey's email is the owner of Hayseed Hamfest and provides nice,
new multi copacitor cans for Drake gear (and others). Go to
www.hayseedhamfest.com and you will see either just the multicapacitor can
or a whole kit of replacement capacitors for your TR4. I've used a lot of
Tom's capacitors and have been pleased with all. The capacitors will be
shown on the schematic with an A, B and C after the designator. I don't have
my TR4 schematic handy this late, hi.
73,
Don, WB5HAK

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[Non-text portions of this message have been removed]

11324. Drake T4xc transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 05:39:10 UTC
From: ka8asn
Topic: 11324 Message: 11324

I have a sick transmitter and need some help if possible. My problem is low output power and its getting weaker the more i work on it. It might be bad output tubes of 6jb6's but not convinced that that is the only problem. I did all of the resistance and voltage checks that are printed in the manual. Even tried to set the Rf trimmers for max output on 80 meters. no luck. I tried to make sure that slugs in coils t4, thru t7 are close to what the manual says. did not seem to help.When I did the resistance check I found that my values were dead on on some and way off on others.This is what I have found so far. On V4 the 12by7a pin one in my chart says infinite, my test showed closed. Pin two 2 the chart shows 97k,I checked 60k, pin 7 the chart says 5.5k I checked 4.0 k. Both of the 6jb6's pin 1, the chart says 6.5k I measured 3.3k and on pin 7 of the 6jb6's both pin 7,s the chart says 6.8k I measured 4.0 k. The rest of the resistance measurements were somewhat close to the chart. These measurements were made with a VTVM with the transmitter connected to the Ac-4 power supply but the power supply disconnected from the wall plug.

The voltage checks are different from what the chart claims them to be.V4 pin number 8 the chart said 160 volts dc I measured 140.V5 pin number 1 chart says 250 I have 240 close but is it enough.Pin 7 of th V5 chart says 250 I have 225 dc.V6 pin number 1 chart says 250 I have 220 pin 7 of V6 also chart says 250 I have 225 vdc. I Have not yet taken the voltage readings from the caps of the 6jb6's yet or any of the high voltage supply.

These readings were taken just as the manual suggest using a 11 megohm VTVM from ground and the transmitter was tuned up on 40 meters using a dummy load of 50 ohms using the correct tuning procedure the gain control was reduced to the very minimum with the mode switch left on tune using a Ac-4 power supply recently upgraded with the heath kit upgrade. At the test points inside the transmitter I have the correct voltages plus a little more.

It might be a possibility that my meter is reading wrong but other voltages my meter and the charts are right on. I was reading in another post that a suggestion to change the diode B5G5 in the cathode circuit of the 12by7a is of poor quality and a change would be a good thing to do. It also appears that R 40 in the 12by7a grid circiut is reading 17.0 ohms and the schematic calls for 15 ohms with 10% silver band on it. I think it shoud be changed due to lack of being out of tolerence.

I used to get 100 watts output when I left the unit in tune until the finals would get almost red,but that can't be right.
Any suggestions would be appreciated.

Thank You
Mike KA8ASN

11325. Re: [DrakeRadio] Drake T4xc transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 06:04:35 UTC
From: Richard Knoppow
Topic: 11324 Message: 11325

If the tube plates ran red for more than a few seconds
the tubes are probably NG. I have seen plates get red
momentarily and the tubes survive but these sweep tubes
don't have much margin for overheating. If the transmitter
was tuned up properly the plates should not show color in
"tune" since the power is cut down from maximum. Maximum
power should be checked in CW but with care in case there is
a problem. With decent tubes the power out on 40 meters
should be more than 150 watts.
I don't know if there are errors in the voltage and
resistance charts of the C, there certainly are for my B. I
suggest getting Garrey Barrell's CD which has a lot of
information not in the handbooks or anywhere else.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

----- Original Message -----
From: "ka8asn" <mtruss8841@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, January 11, 2013 9:39 PM
Subject: [DrakeRadio] Drake T4xc transmitter

>I have a sick transmitter and need some help if possible.
>My problem is low output power and its getting weaker the
>more i work on it. It might be bad output tubes of 6jb6's
>but not convinced that that is the only problem. I did all
>of the resistance and voltage checks that are printed in
>the manual. Even tried to set the Rf trimmers for max
>output on 80 meters. no luck. I tried to make sure that
>slugs in coils t4, thru t7 are close to what the manual
>says. did not seem to help.When I did the resistance check
>I found that my values were dead on on some and way off on
>others.This is what I have found so far. On V4 the 12by7a
>pin one in my chart says infinite, my test showed closed.
>Pin two 2 the chart shows 97k,I checked 60k, pin 7 the
>chart says 5.5k I checked 4.0 k. Both of the 6jb6's pin 1,
>the chart says 6.5k I measured 3.3k and on pin 7 of the
>6jb6's both pin 7,s the chart says 6.8k I measured 4.0 k.
>The rest of the resistance measurements were somewhat close
>to the chart. These measurements were made with a VTVM with
>the transmitter connected to the Ac-4 power supply but the
>power supply disconnected from the wall plug.

>
> The voltage checks are different from what the chart
> claims them to be.V4 pin number 8 the chart said 160 volts
> dc I measured 140.V5 pin number 1 chart says 250 I have
> 240 close but is it enough.Pin 7 of th V5 chart says 250 I
> have 225 dc.V6 pin number 1 chart says 250 I have 220 pin
> 7 of V6 also chart says 250 I have 225 vdc. I Have not yet
> taken the voltage readings from the caps of the 6jb6's yet
> or any of the high voltage supply.
>
> These readings were taken just as the manual suggest using
> a 11 megohm VTVM from ground and the transmitter was tuned
> up on 40 meters using a dummy load of 50 ohms using the
> correct tuning procedure the gain control was reduced to
> the very minimum with the mode switch left on tune using a
> Ac-4 power supply recently upgraded with the heath kit
> upgrade. At the test points inside the transmitter I have
> the correct voltages plus a little more.
>
> It might be a possibility that my meter is reading wrong
> but other voltages my meter and the charts are right on. I
> was reading in another post that a suggestion to change
> the diode B5G5 in the cathode circuit of the 12by7a is of
> poor quality and a change would be a good thing to do. It
> also appears that R 40 in the 12by7a grid circiut is
> reading 17.0 ohms and the schematic calls for 15 ohms
> with 10% silver band on it. I think it shoud be changed
> due to lack of being out of tolerence.
>
> I used to get 100 watts output when I left the unit in
> tune until the finals would get almost red,but that can't
> be right.
> Any suggestions would be appreciated.
>
> Thank You
> Mike KA8ASN
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> Yahoo! Groups Links
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11326. Re: [DrakeRadio] Drake T4xc transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 15:33:34 UTC
From: Garey Barrell
Topic: 11324 Message: 11326

Mike -

I think you have a dead set of finals. Is the IDLE current set for 0.070A, and have you had to
reset it recently? If you have a replacement set, try them before going any further. If you don't
have any, start looking for some and while you're waiting ... :-) If at all possible, get
Sylvania, Zenith, RCA or GE branded 6JB6(A). There appear to be 'some' rogue tubes that are taller
than the specification of 3.125" seated height, and will not fit in the PA cage, so confirm with the
seller that they are under 3.125". As mentioned below, you might want to pick up a set of 6GJ5(A)s
for test purposes. Same brand caveats as with the JB's. They are considerably cheaper, and work
just as well, although 'some' seem to have trouble getting all the way to 10M....

I don't put much stock in the Resistance or Voltage readings in the manual. They sometimes remain
unchanged when schematics are changed, and can lead you down a rabbit hole if you let them. Most
variances can be accounted for if you trace the _correct_ schematic for your radio. Worst are the
ones that measure resistance back through the power supply. Too many variances involved in both
unit under test and test equipment, so if you DO get a 'correct' reading it's purely accidental! :-)

Your only significant voltage variance is the Screens of the PA tubes, and they read low in TUNE
because R45 is placed in series with the supply in TUNE mode to limit maximum plate current. The
plates should NOT show color under any normal circumstances, and allowing them to do so will weaken
and kill them in short order. You should be able to load the transmitter into a good dummy loadto
full power in TUNE mode (~145W on 40M) and sit for several minutes without showing color. I used to
run RTTY at full power for over 30 minutes at a time and PA tubes would last a couple of years. A
properly tuned transmitter into a well matched load should not show plate color.

Your 100W output indicates either improper tuning, a poor load, or weak PA tubes. Normal operation
would be ~350 mA of Plate current, at 650 Plate volts for 228W input power, and 120W output powerfor

about 52% efficiency. Deviation from these nominal numbers indicate an error in one or more measurements! The Plate meter is subject to error from shunt resistor(s) degradation, and output
power is subject to typical frequency variations, not to mention the +/- 5% of FULL SCALE of even
the BIRD 43. Most ham wattmeters are less accurate than that. So more or less output or efficiency
than this indicates measurement errors, and less 'probably' indicates PA tube deterioration.

When working on any of the 4 Series transmitters, I always arrange a small fan to blow air across
the PA area to minimize overheating developed in tuning / adjusting.

I keep a pair of 6GJ5 tubes that I use just for troubleshooting. My Sylvania/Zenith 6JB6's only go
into a properly working transmitter!

R40 is just a parasitic stopper, and it's value is not critical.

Start by checking R50 through R54 for value and condition. R53 and 54 should be within 5% of value
AND each other for proper PA tube matching. Check R43 and 44 for value and condition.

Substitute V1 if you have a spare, if not swap V1 and V9. If nodifference, swap back.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

ka8asn wrote:
> I have a sick transmitter and need some help if possible. My problem is low output power and its getting weaker the more i work on it. It might be bad output tubes of 6jb6's but not convinced that that is the only problem. I did all of the resistance and voltage checks that are printed in the manual. Even tried to set the Rf trimmers for max output on 80 meters. no luck. I tried to make sure that slugs in coils t4, thru t7 are close to what the manual says. did not seem to help.When I did the resistance check I found that my values were dead on on some and way off on others.This is what I have found so far. On V4 the 12by7a pin one in my chart says infinite, my test showed closed. Pin two 2 the chart shows 97k,I checked 60k, pin 7 the chart says 5.5k I checked 4.0 k. Both of the 6jb6's pin 1, the chart says 6.5k I measured 3.3k and on pin 7 of the 6jb6's both pin 7,s the chart says 6.8k I measured 4.0 k. The rest of the resistance measurements were somewhat close to the chart. These measurements were made with a VTVM with the transmitter connected to the Ac-4 power supply but the power supply disconnected from the wall plug.
>
> The voltage checks are different from what the chart claims them to be.V4 pin number 8 the chart said 160 volts dc I measured 140.V5 pin number 1 chart says 250 I have 240 close but is it enough.Pin 7 of th V5 chart says 250 I have 225 dc.V6 pin number 1 chart says 250 I have 220 pin 7 of V6 also chart says 250 I have 225 vdc. I Have not yet taken the voltage

readings from the caps of the 6jb6's yet or any of the high voltage supply.
>
> These readings were taken just as the manual suggest using a 11 megohm VTVM from ground and the transmitter was tuned up on 40 meters using a dummy load of 50 ohms using the correct tuning procedure the gain control was reduced to the very minimum with the mode switch left on tune using a Ac-4 power supply recently upgraded with the heath kit upgrade. At the test points inside the transmitter I have the correct voltages plus a little more.
>
> It might be a possibility that my meter is reading wrong but other voltages my meter and the charts are right on. I was reading in another post that a suggestion to change the diode B5G5 in the cathode circuit of the 12by7a is of poor quality and a change would be a good thing to do. It also appears that R 40 in the 12by7a grid circiut is reading 17.0 ohms and the schematic calls for 15 ohms with 10% silver band on it. I think it shoud be changed due to lack of being out of tolerence.
>
> I used to get 100 watts output when I left the unit in tune until the finals would get almost red,but that can't be right.
> Any suggestions would be appreciated.
>
> Thank You
> Mike KA8ASN
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11327. Wanted 2-B Band Crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 16:50:23 UTC
From: Darrell Bellerive
Topic: 11327 Message: 11327

I am looking for the following band crystals for my Drake 2-B. I want to expand coverage to all amateur bands from 160 meters through 10 meters. I already have the 160 meter conversion for the "A" band. I am hoping to find used crystals rather than have new ones built, but have the feeling these will be scarce on the used market. Here's to hoping though...

9.0 MHz for 60 meter band on switch position B
14.0 MHz for 30 meter band on switch position C
14.5 MHz for 17 meter band on switch position D

Third overtone type:
21.0 MHz for 12 meter band on switch position E
24.5 MHz for 10 meter band on switch position 10-1
25.6 MHz for 10 meter band on switch position 10-3

Please contact me off list.

73, Darrell VA7TO

--
Darrell Bellerive

11328. Re: [DrakeRadio] Wanted 2-B Band Crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 16:55:53 UTC
From: Paul Kraemer
Topic: 11327 Message: 11328

Darrell
Check Mouser and DigiKey
There are many crystals there in the less than a dollar range that will work, if you find a frequency that is what you need, you just need to solder them in
Not the micropower type but many of the microproicessor / digital application type are ok.
I have done that on my 2B and some other tube and hybrid radios
Paul K0UYA
----- Original Message -----
From: "Darrell Bellerive" <drbellerive.va7to@...>
To: <drakelist@...>; <DrakeRadio@yahoogroups.com>
Sent: Saturday, January 12, 2013 10:50 AM
Subject: [DrakeRadio] Wanted 2-B Band Crystals

>I am looking for the following band crystals for my Drake 2-B. I want to
> expand coverage to all amateur bands from 160 meters through 10 meters.
> I already have the 160 meter conversion for the "A" band. I am hoping to
> find used crystals rather than have new ones built, but have the feeling
> these will be scarce on the used market. Here's to hoping though...
>
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> 14.0 MHz for 30 meter band on switch position C
> 14.5 MHz for 17 meter band on switch position D
>
> Third overtone type:
> 21.0 MHz for 12 meter band on switch position E
> 24.5 MHz for 10 meter band on switch position 10-1
> 25.6 MHz for 10 meter band on switch position 10-3
>
> Please contact me off list.
>
> 73, Darrell VA7TO
>
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>
> --
> Darrell Bellerive
>
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> Yahoo! Groups Links
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11329. Re: R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 18:42:32 UTC
From: Victor
Topic: 594 Message: 11329

Garey
Followed your suggestions and problem solved. Checked all wiring around V1 and de-oxed tube pins, switches etc. No broken joints. Tuned to 14.3 and then turned the trimmers both ways. After that I re-peaked and up came the calib sig - very strong. Checked on 14.000, 14025 and 14050 and calib strong and consistent at each point.
Rx working beautifully now.
Your help very much appreciated.
73
Vic
G4JSS

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Vic -
>
> Sounds like you have it localized. That first trimmer is the plate circuit of the RF Amp stage. I
> would suspect a broken solder connection, or perhaps just a piece of metal around the trimmer, or a
> dirty switch contact. I would first tune in the Calibrator on 14.3 (I think that is the alignment
> frequency) and then carefully peak the PreSelector. Using a non-metallic tool, rock that first
> trimmer cap adjustment around a turn or two in each direction, and then re-peakit.
>
> If still intermittent, carefully inspect the wiring switch contacts and fixed capacitors associated
> with that trimmer for shorts and/or solder problems. Also check all the screws in the area for
> tightness, if you have already done so. Check all connections around the tube socket (V1), and
> DeoxIT the tube pins.
>
> Lemme know!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Victor wrote:
> > Garey
> > Shortly before Xmas I mentioned that I had a problem with the R-4C. As you will have

dealt with hundreds of problems since then I'll refresh your memory.
> > The Rx works but suddenly the sensitivity went off on 20m. On 14.000khz I could just hear the calib sig but on 14.025 it was about S5. Go up to 14.050 and it was barely audible. Sigs were the same.
> > You suggested checking the pre-select rack which I have now done. All the slugs are sitting comfortably and all the same height - 11/32". Also checked and de-oxed the switching and all the associated wiring seems OK.
> > Now we come to the strange bit. On the top chassis there are 4 banks of trimmers and on each bank there is one marked 14.3. If I touch the 14.3 nearest the front panel (just underneath the meter) the 20m band comes back to life and this happens irrespective of what freq I have the PTO set at. A fraction of a turn of the trimmer to the left and the RX is alive and a fraction to the right leaves it deaf - this is on 20m the other bands are OK.
> > So, in a word, I'm lost. This is the second time this has happened and each time just barely touching that trimmer has brought 20m back to life.
> >
> > Any ideas, please?
> > Vic
> > G4JSS
> >
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> > Yahoo! Groups Links
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11330. Re: [DrakeRadio] Wanted 2-B Band Crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 18:54:58 UTC
From: n4buq
Topic: 11327 Message: 11330

Hi Darrell,

I may have some of those. Let me check. I'll get back with you.

73,
Barry - N4BUQ

On 1/12/2013 10:50 AM, Darrell Bellerive wrote:
> I am looking for the following band crystals for my Drake 2-B. I want to
> expand coverage to all amateur bands from 160 meters through 10 meters.
> I already have the 160 meter conversion for the "A" band. I am hoping to
> find used crystals rather than have new ones built, but have the feeling
> these will be scarce on the used market. Here's to hoping though...
>
> 9.0 MHz for 60 meter band on switch position B
> 14.0 MHz for 30 meter band on switch position C
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> Third overtone type:
> 21.0 MHz for 12 meter band on switch position E
> 24.5 MHz for 10 meter band on switch position 10-1
> 25.6 MHz for 10 meter band on switch position 10-3
>
> Please contact me off list.
>
> 73, Darrell VA7TO
>
>
>
>

11331. My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 20:10:12 UTC
From: Carl Maniscalco
Topic: 11331 Message: 11331

I'm having a problem with my T-4X that I can't figure out. It was working fine until, one day, it started going into transmit as soon as I plugged in my mic. It's not the mic because it did the same thing when I plugged in a different one.

A couple of possible clues:

1) CW output is intermittent; sometimes it puts out full power, other times it puts out nothing (I can get 100 watts or more out on tune-up, so the finals are okay).

2) I always run PTT but have had trouble with the VOX circuitry on this radio in the past, when it caused transmit to hang after I released the PTT switch. I had to ask George WB6YEC to fix that one for me but I don't want to keep bothering him with this, plus I would like to see if I can fix this myself. How else am I ever going to learn about boat anchors—even relatively light one like the Drakes?

11332. Re: [DrakeRadio] My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 20:29:46 UTC
From: Kris Merschrod
Topic: 11331 Message: 11332

Carl,

I'f I were at your side I would :

1) disconnect the T-4x from the R-4any to elminiate the Receiver from the equation

2) If the key is pluged in I'd pull that, and then examine the key for short or even those pesky knife switches

3) The Mic - unplug that for starters too

4) look over all of the switches on the front making sure that the USB position is used first.

4) Then plug it in and then turn the rig on - only go to SSB mode

IF the rig goes into xmit w/o turning it on, i.e., just plugging it in, then you have a problem in the mode switch for sure.

The VOX issue that you mention - move the vox and anti vox to the far position (least sensitive Vox and least antivox - sri I am not too clear on that) but the vox could be completely shut down.

God lucke with it,

Kris KM2KM

----- Original Message -----
From: "Carl Maniscalco" <kj6bso@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, January 12, 2013 3:10 PM
Subject: [DrakeRadio] My T-4X Wants to Transmit!

I'm having a problem with my T-4X that I can't figure out. It was working fine until, one day, it started going into transmit as soon as I plugged in my mic. It's not the mic because it did the same thing when I plugged in a different one.

A couple of possible clues:

1) CW output is intermittent; sometimes it puts out full power, other times it puts out nothing (I can get 100 watts or more out on tune-up, so the finals are okay).

2) I always run PTT but have had trouble with the VOX circuitry on this radio in the past, when it caused transmit to hang after I released the PTT switch. I had to ask George WB6YEC to fix that one for me but I don't want to keep bothering him with this, plus I would like to see if I can fix this

myself. How else am I ever going to learn about boat anchors?even relatively light one like the Drakes?

Yahoo! Groups Links

11333. Re: [DrakeRadio] My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 21:08:59 UTC
From: Al Parker
Topic: 11331 Message: 11333

Hi Carl,
I'd worry that the bias supply is not doing it's job, probably because
the filter cap in it is bad. That can make it to go into xmit when you
turn it on, even if it's in SB posn or CW with a key plugged in & open.
If you don't shut it off quickly it'll fry your finals.
If the bias is OK, then look at the relay ctrl tube.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 1/12/2013 3:10 PM, Carl Maniscalco wrote:
> I'm having a problem with my T-4X that I can't figure out. It was working fine until, one day, it started going into transmit as soon as I plugged in my mic. It's not the mic because it did the same thing when I plugged in a different one.
>
> A couple of possible clues:
>
> 1) CW output is intermittent; sometimes it puts out full power, other times it puts out nothing (I can get 100 watts or more out on tune-up, so the finals are okay).
>
> 2) I always run PTT but have had trouble with the VOX circuitry on this radio in the past, when it caused transmit to hang after I released the PTT switch. I had to ask George WB6YEC to fix that one for me but I don't want to keep bothering him with this, plus I would like to see if I can fix this myself. How else am I ever going to learn about boat anchors?even relatively light one like the Drakes?
>
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> Yahoo! Groups Links
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11334. Re: Drake T4xc transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 20:30:43 UTC
From: k5fex
Topic: 11324 Message: 11334

Will tell you what i discovered with my T-4XC this week. It has been exhibiting the same symptoms - no idle bias low output, cant load.

After extensive review of resistances, voltages, visual inspections, i thought that maybe the green stuff on the wafer switches could be trouble, first removed some with pencil eraser, then used DeOxit on each wafer. After spraying and letting set for a little while, I used compressed air to blow out any remaining liquid. Voila! problem solved.

Now, though, have new issue: low audio on transmit. I think i'v tracked it down to mic preamp tube (12AX7A) will be pulling it to test. But, without PEP output meter kind of hard to say for sure it's the audio levels. Key down on all bands at 250 mils gives at least 100 watts output on the meter.

Wayne,
K5FEX

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Mike -
>
> I think you have a dead set of finals. Is the IDLE current set for 0.070A, and have you had to
> reset it recently? If you have a replacement set, try them before going any further. If you don't
> have any, start looking for some and while you're waiting ... :-) If at all possible, get
> Sylvania, Zenith, RCA or GE branded 6JB6(A). There appear to be 'some' rogue tubes that are taller
> than the specification of 3.125" seated height, and will not fit in the PA cage, so confirm with the
> seller that they are under 3.125". As mentioned below, you might want to pick up a set of 6GJ5(A)s
> for test purposes. Same brand caveats as with the JB's. They are considerably cheaper, and work
> just as well, although 'some' seem to have trouble getting all the way to 10M....
>
> I don't put much stock in the Resistance or Voltage readings in the manual. They sometimes remain
> unchanged when schematics are changed, and can lead you down a rabbit hole if you let them. Most
> variances can be accounted for if you trace the _correct_ schematic for your radio. Worst are the
> ones that measure resistance back through the power supply. Too many variances involved in both
> unit under test and test equipment, so if you DO get a 'correct' reading it's purely accidental! :-)
>

> Your only significant voltage variance is the Screens of the PA tubes, and they read low in TUNE
> because R45 is placed in series with the supply in TUNE mode to limit maximum plate current. The
> plates should NOT show color under any normal circumstances, and allowing them to do so will weaken
> and kill them in short order. You should be able to load the transmitter into a good dummy loadto
> full power in TUNE mode (~145W on 40M) and sit for several minutes without showing color. I used to
> run RTTY at full power for over 30 minutes at a time and PA tubes would last a couple of years. A
> properly tuned transmitter into a well matched load should not show plate color.
>
> Your 100W output indicates either improper tuning, a poor load, or weak PA tubes. Normal operation
> would be ~350 mA of Plate current, at 650 Plate volts for 228W input power, and 120W output powerfor
> about 52% efficiency. Deviation from these nominal numbers indicate an error in one or more
> measurements! The Plate meter is subject to error from shunt resistor(s) degradation, and output
> power is subject to typical frequency variations, not to mention the +/- 5% of FULL SCALE of even
> the BIRD 43. Most ham wattmeters are less accurate than that. So more or less output or efficiency
> than this indicates measurement errors, and less 'probably' indicates PA tube deterioration.
>
> When working on any of the 4 Series transmitters, I always arrange a small fan to blow air across
> the PA area to minimize overheating developed in tuning / adjusting.
>
> I keep a pair of 6GJ5 tubes that I use just for troubleshooting. My Sylvania/Zenith 6JB6's only go
> into a properly working transmitter!
>
> R40 is just a parasitic stopper, and it's value is not critical.
>
> Start by checking R50 through R54 for value and condition. R53 and 54 should be within 5% of value
> AND each other for proper PA tube matching. Check R43 and 44 for value and condition.
>
> Substitute V1 if you have a spare, if not swap V1 and V9. If nodifference, swap back.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs

>
>
> ka8asn wrote:
> > I have a sick transmitter and need some help if possible. My problem is low output power and its getting weaker the more i work on it. It might be bad output tubes of 6jb6's but not convinced that that is the only problem. I did all of the resistance and voltage checks that are printed in the manual. Even tried to set the Rf trimmers for max output on 80 meters. no luck. I tried to make sure that slugs in coils t4, thru t7 are close to what the manual says. did not seem to help.When I did the resistance check I found that my values were dead on on some and way off on others.This is what I have found so far. On V4 the 12by7a pin one in my chart says infinite, my test showed closed. Pin two 2 the chart shows 97k,I checked 60k, pin 7 the chart says 5.5k I checked 4.0 k. Both of the 6jb6's pin 1, the chart says 6.5k I measured 3.3k and on pin 7 of the 6jb6's both pin 7,s the chart says 6.8k I measured 4.0 k. The rest of the resistance measurements were somewhat close to the chart. These measurements were made with a VTVM with the transmitter connected to the Ac-4 power supply but the power supply disconnected from the wall plug.
> >
> > The voltage checks are different from what the chart claims them to be.V4 pin number 8 the chart said 160 volts dc I measured 140.V5 pin number 1 chart says 250 I have 240 close but is it enough.Pin 7 of th V5 chart says 250 I have 225 dc.V6 pin number 1 chart says 250 I have 220 pin 7 of V6 also chart says 250 I have 225 vdc. I Have not yet taken the voltage readings from the caps of the 6jb6's yet or any of the high voltage supply.
> >
> > These readings were taken just as the manual suggest using a 11 megohm VTVM from ground and the transmitter was tuned up on 40 meters using a dummy load of 50 ohms using the correct tuning procedure the gain control was reduced to the very minimum with the mode switch left on tune using a Ac-4 power supply recently upgraded with the heath kit upgrade. At the test points inside the transmitter I have the correct voltages plus a little more.
> >
> > It might be a possibility that my meter is reading wrong but other voltages my meter and the charts are right on. I was reading in another post that a suggestion to change the diode B5G5 in the cathode circuit of the 12by7a is of poor quality and a change would be a good thing to do. It also appears that R 40 in the 12by7a grid circiut is reading 17.0 ohms and the schematic calls for 15 ohms with 10% silver band on it. I think it shoud be changed due to lack of being out of tolerence.
> >
> > I used to get 100 watts output when I left the unit in tune until the finals would get almost red,but that can't be right.
> > Any suggestions would be appreciated.
> >
> > Thank You
> > Mike KA8ASN
> >
> >
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> >
> > Yahoo! Groups Links
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11335. L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-12 20:35:55 UTC
From: k5fex
Topic: 11335 Message: 11335

Have L-4B that has been sitting for about 5 years. Ready to get it up and going with the rest of the C line. Have 220V supply for the PS.

Looking for suggestions on procedures for cold start and any operating ideas for its use.

73
Wayne
K5FEX

11336. Re: [DrakeRadio] My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 02:46:57 UTC
From: Garey Barrell
Topic: 11331 Message: 11336

Carl -

Almost certainly BIAS supply failing. Excessive ripple fromhigh ESR electrolytic caps and do that.
(C5)

DO NOT leave the transmitter on if unattended. Complete BIAS supply failure can key the transmitter
and destroy the PA tubes, even if left in STANDBY.

Simplest fix is the AC-4R upgrade kit for the AC-4 which replaces all active components with PC
board mountedcaps and resistors. At the very least replace C5 and D7 before you turn it on again.

<www.theheathkitshop.com>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Carl Maniscalco wrote:
> I'm having a problem with my T-4X that I can't figure out. It was working fine until, one day, it started going into transmit as soon as I plugged in my mic. It's not the mic because it did the same thing when I plugged in a different one.
>
> A couple of possible clues:
>
> 1) CW output is intermittent; sometimes it puts out full power, other times it puts out nothing (I can get 100 watts or more out on tune-up, so the finals are okay).
>
> 2) I always run PTT but have had trouble with the VOX circuitry on this radio in the past, when it caused transmit to hang after I released the PTT switch. I had to ask George WB6YEC to fix that one for me but I don't want to keep bothering him with this, plus I would like to see if I can fix this myself. How else am I ever going to learn about boat anchors?even relatively light one like the Drakes?
>
>

11337. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 04:12:39 UTC
From: amfone
Topic: 11335 Message: 11337

Wayne

Check to make sure the tubes are in the sockets correctly and no noticeable damage. Open the bottom and see if any dust or dirt can be removed and visually look at components. Check power supply in the same manner.

Turn on in the low tap position and do not apply power let it just run, see that you are getting 1,750 or close on idlel. Make sure grid current is a zero and there is no plate current. Let it run at idle off and on for about 20 hours.

From: k5fex <oilieone@cox.net>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, January 12, 2013 3:35 PM
Subject: [DrakeRadio] L4-B startup

Have L-4B that has been sitting for about 5 years. Ready to get it up and going with the rest of the C line. Have 220V supply for the PS.

Looking for suggestions on procedures for cold start and any operating ideas for its use.

73
Wayne
K5FEX

[Non-text portions of this message have been removed]

11338. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 09:52:19 UTC
From: Joe
Topic: 11335 Message: 11338

20 hours???!! Why so long? The P.S. Caps? The tubes (3-500Z's) sure don't need it..if they are gassy, as soon as the tube comes to temp, the gassy problem is taken care of.

Joe - WA6RKN

----- Original Message -----
From: "amfone" <amfone20000@...>
Subject: Re: [DrakeRadio] L4-B startup

Wayne

Check to make sure the tubes are in the sockets correctly and no noticeable damage. Open the bottom and see if any dust or dirt can be removed and visually look at components. Check power supply in the same manner.

Turn on in the low tap position and do not apply power let it just run, see that you are getting 1,750 or close on idlel. Make sure grid current is a zero and there is no plate current. Let it run at idle off and on for about 20 hours.

11339. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 15:27:39 UTC
From: Bernie
Topic: 11335 Message: 11339

I'm sure it is to re-form the power supply caps.

Bernie in ND
WD0GMD

----- Original Message -----
From: Joe
To: DrakeRadio@...m
Sent: Sunday, January 13, 2013 3:52 AM
Subject: Re: [DrakeRadio] L4-B startup

20 hours???!! Why so long? The P.S. Caps? The tubes (3-500Z's) sure don't need it..if they are gassy, as soon as the tube comes to temp, the gassy problem is taken care of.

Joe - WA6RKN

----- Original Message -----
From: "amfone" amfone20000@...>
Subject: Re: [DrakeRadio] L4-B startup

Wayne

Check to make sure the tubes are in the sockets correctly and no noticeable damage. Open the bottom and see if any dust or dirt can be removed and visually look at components. Check power supply in the same manner.

Turn on in the low tap position and do not apply power let it just run, see that you are getting 1,750 or close on idlel. Make sure grid current is a zero and there is no plate current. Let it run at idle off and on for about 20 hours.

[Non-text portions of this message have been removed]

11340. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 15:41:30 UTC
From: Garey Barrell
Topic: 11335 Message: 11340

Interesting. I'm with you up to the '20 hours'(?) part. An hour or two is more than adequate to
drive out any residual moisture from the transformers, which is the only benefit of running in idle
mode.??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

amfone wrote:
> Wayne
>
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>
> Turn on in the low tap position and do not apply power let it just run, see that you are getting 1,750 or close on idlel. Make sure grid current is a zero and there is no plate current. Let it run at idle off and on for about 20 hours.
>
>
> _____
> From: k5fex <oilieone@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, January 12, 2013 3:35 PM
> Subject: [DrakeRadio] L4-B startup
>
>
>
> Have L-4B that has been sitting for about 5 years. Ready to get it up and going with the rest of the C line. Have 220V supply for the PS.
>
> Looking for suggestions on procedures for cold start and any operating ideas for its use.
>
> 73
> Wayne
> K5FEX
>

11341. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 15:52:02 UTC
From: Garey Barrell
Topic: 11335 Message: 11341

If the tubes are 'gassy', running them at idle isn't going to help. I think this is the result of
an old 'Ham's' tale from before WW-II.

According to Bill Eitel, tantalum was used in power tube plates originally, and DID perform a
'getter' action when heated to red heat. This allegedly was the source of the pre-war 'story' that
if you 'baby'd' your Eimac tubes they lasted about as long as other brands. But if you ran them
HARD, they lasted much longer!

Unfortunately for us, tantalum was expensive and was no longer used in tube plates after the war, at
least up to the 70's, when the above was published.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Joe wrote:
> 20 hours???!! Why so long? The P.S. Caps? The tubes (3-500Z's) sure don't
> need it..if they are gassy, as soon as the tube comes to temp, the gassy
> problem is taken care of.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "amfone" <amfone20000@...>
> Subject: Re: [DrakeRadio] L4-B startup
>
>
> Wayne
>
> Check to make sure the tubes are in the sockets correctly and no noticeable
> damage. Open the bottom and see if any dust or dirt can be removed and
> visually look at components. Check power supply in the same manner.
>
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>

11342. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 15:54:09 UTC
From: Garey Barrell
Topic: 11335 Message: 11342

If the power supply caps don't 're-form' in the first couple of minutes, they aren't going to. If
they'do' seem to re-form, they won't last very long. (Probably not 20 hours!) :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
> I'm sure it is to re-form the power supply caps.
>
> Bernie in ND
> WD0GMD
>
>
> ----- Original Message -----
> From: Joe
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, January 13, 2013 3:52 AM
> Subject: Re: [DrakeRadio] L4-B startup
>
>
>
> 20 hours???!! Why so long? The P.S. Caps? The tubes (3-500Z's) sure don't
> need it..if they are gassy, as soon as the tube comes to temp, the gassy
> problem is taken care of.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "amfone" amfone20000@...>
> Subject: Re: [DrakeRadio] L4-B startup
>
> Wayne
>
> Check to make sure the tubes are in the sockets correctly and no noticeable
> damage. Open the bottom and see if any dust or dirt can be removed and
> visually look at components. Check power supply in the same manner.
>
> Turn on in the low tap position and do not apply power let it just run, see
> that you are getting 1,750 or close on idlel. Make sure grid current is a
> zero and there is no plate current. Let it run at idle off and on for about
> 20 hours.

>
>

11343. Re: My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 17:10:48 UTC
From: Carl Maniscalco
Topic: 11331 Message: 11343

Okay, thanks for all your help. It didn't occur to me to mention that I'd already built the AC-4 with the kit from the Heathkit shop so I don't think that the bias is the problem. I have ordered a new 6EV7 VOX control tube (only $5.95 from Antique Electronics, seemed worth it) and will try all the other suggestions out.

73,

Carl, KJ6BSO

11344. Re: [DrakeRadio] Re: T4XC Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 17:30:32 UTC
From: Richard Hanna
Topic: 6245 Message: 11344

Well, did a few things today. New 6EJ7, and replaced R114.

According to the counter I have 12.645Mhz getting to C29. Akso seeing it on the "bottom" pin of T3.

However, the grid and plate of the 6AU6 mixer seem to show the 5.645 freq. Note: Counter is an old Yaesu YC500 with input impedance of 1Mohm.

I tried another 6AU6, with no change. I checked the resistance of the T3 secondary, it's about 2 ohms.

I do see a little increase in plate current above the bias setting at 7Mhz, but see a bigger increase at the 5.6Mhz.

While in there, I did do the resistance and voltage checks, which, like you I don't totally rely on them, but they were close enough to the table to tell me it looks like the circuitry is intact. At one point I did try a new driver tube and finals too, with no change.

One interesting thing I noticed is with the "Transceve" switch in "recv" the PTO light does not go out. Not sure how (or if) that is connected to this problem, but I did notice that the 16MHZ crystal freq does go away, so probably something in that particular curcuit.

So, still not there, but looks to me like it is something happening in the mixer stage. I will do some more "poking" later.

The CD sure has been a help identifying where parts are. That was a good investment!

Thanks again for the help...

Dick Hanna
K3VYY

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Friday, January 11, 2013 9:13 PM
Subject: [DrakeRadio] Re: T4XC Problem

Dick -

Keep us posted!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Richard Hanna wrote:
> Thanks Gary for the quick reply. Well, I found a couple things. The output of the driver was 5645
> khz! I went to check the output of the PreMixer (6EJ7) and accidentally hit the switch on my
> counter making it low impedance, and when I connected to the plate of the 6EJ7, R114 let all the
> smoke out! I did check the 6EJ7 on my TV& tube tested and the output is really bad. Had a spare,
> so checked it and plugged it into the radio.
> So, I think I will give up for the day...I've been messing with it most of the day. I will replace
> the resistor probably Monday, and go back at it, but sounds like you are on the right track. I
> think I will check the continuity through the transformers while I am at it, and start again, but
> made more progress in the last hour that the last year (Hi!) And...I learned a little more how
> this thing works.
> Thanks again...will get back to you with what I find.
> Dick
> K3VYY
>
> *From:* Garey Barrell mailto:k4oah%40mindspring.com>
> *To:* Richard Hanna mailto:k3vyy%40yahoo.com>
> *Sent:* Friday, January 11, 2013 2:34 PM
> *Subject:* Re: T4XC Problem
>
> Hi Dick -
>
> That's definitely low on the CO, but I don't think that's where the problem lies.
>
> I have several of these 'projects' going a the moment, so forgive me if I repeat. We have the CO
> on frequency, we have the BAND oscillator on frequency so far as weknow. We're working on 40M, so
> if the PTO is set to 0.000, we should have 12.645 MHz at C29 on T3's secondary. This is the
> PreMixer signal, and is derived from the BAND osc at 18.1 MHz and the PTO at 5.455 MHz.
>
> The fact that the RF TUNE is peaking well below 40M leads me to Figure 3-2 of the manual. The
> curves here show that 'well below' the 40M band segment on the 40M band is in the range of 5.645
> MHz. What happens here is that if the PreMixer (12.645 MHz) is NOT present, then the Carrier Osc
> signal at 5.645 MHzis what you're peaking on. So check that the PreMixer (V8) DOES have output at
> 12.645 MHz, and that it is present at C29.
>
> You should have a clean 7.000 MHz signal at the PLATE of V3 (at least 6 V p-p.) Ensure

that your
> PLATE trimmer cap of V3 is peaked on 7.000 and NOT 5.645 MHz! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> http://www.k4oah.com/>
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[Non-text portions of this message have been removed]

11345. Re: [DrakeRadio] Re: My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 17:51:11 UTC
From: Garey Barrell
Topic: 11331 Message: 11345

Carl -

Ah, with a good BIAS supply the tube is next. Be sure and set the VOXGAIN and ANTI-VOX controls per
the manual, otherwise it's easy to get them crossed up.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Carl Maniscalco wrote:
> Okay, thanks for all your help. It didn't occur to me to mention that I'd already built the AC-4 with the kit from the Heathkit shop so I don't think that the bias is the problem. I have ordered a new 6EV7 VOX control tube (only $5.95 from Antique Electronics, seemed worth it) and will try all the other suggestions out.
>
> 73,
>
> Carl, KJ6BSO
>

11346. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 18:00:45 UTC
From: Jim Shorney
Topic: 11335 Message: 11346

I've always been led to believe that it was zirconium gettering material coated
on the plate that required the tubes to be run red.

http://en.wikipedia.org/wiki/Getter#Non-evaporable_getters

73

-Jim
NU0C

On Sun, 13 Jan 2013 10:52:02 -0500, Garey Barrell wrote:

>If the tubes are 'gassy', running them at idle isn't going to help. I think this is the
result of
>an old 'Ham's' tale from before WW-II.
>
>According to Bill Eitel, tantalum was used in power tube plates originally, and DID
perform a
>'getter' action when heated to red heat. This allegedly was the source of the pre-war
'story' that
>if you 'baby'd' your Eimac tubes they lasted about as long as other brands. But if you ran
them
>HARD, they lasted much longer!
>
>Unfortunately for us, tantalum was expensive and was no longer used in tube plates after
the war, at
>least up to the 70's, when the above was published.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Joe wrote:
>> 20 hours???!! Why so long? The P.S. Caps? The tubes (3-500Z's) sure don't
>> need it..if they are gassy, as soon as the tube comes to temp, the gassy
>> problem is taken care of.
>>
>> Joe - WA6RKN
>>
>> ----- Original Message -----
>> From: "amfone" <amfone20000@...>
>> Subject: Re: [DrakeRadio] L4-B startup
>>

>>
>> Wayne
>>
>> Check to make sure the tubes are in the sockets correctly and no noticeable
>> damage. Open the bottom and see if any dust or dirt can be removed and
>> visually look at components. Check power supply in the same manner.
>>
>> Turn on in the low tap position and do not apply power let it just run, see
>> that you are getting 1,750 or close on idlel. Make sure grid current is a
>> zero and there is no plate current. Let it run at idle off and on for about
>> 20 hours.
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>> ------------------------------------
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>> Yahoo! Groups Links
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☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11347. 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 18:20:38 UTC
From: russellhulett
Topic: 11347 Message: 11347

Wondering whether performance of these is essentially the same, seem to recall reading that was the case. The performance numbers found at one web site that tested old receivers indicated they were pretty close on the 20 kHz dynamic range. Would seem that for AM, the R4 might have an edge because of the 4.8 kHz bandwidth as compared to 3.6 on the 2B?

I own the first and have owned the latter, prefer the 2B from simplicity standpoint.

73, Curt KB5JO

11348. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 18:28:26 UTC
From: Richard Knoppow
Topic: 11335 Message: 11348

----- Original Message -----
From: "Jim Shorney" <jshorney@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 10:00 AM
Subject: Re: [DrakeRadio] L4-B startup

I've always been led to believe that it was zirconium
gettering material coated
on the plate that required the tubes to be run red.

http://en.wikipedia.org/wiki/Getter#Non-evaporable_getters

73

-Jim
NU0C

I have forgotten Eimac's name for the new plate
material and couldn't find an ad for it just now. I think
it is the new material that includes a zirconium coating for
gettering. Tantalum is inherently a getter when hot. I
don't think cost was the reason for the change but rather
the operating conditions needed by tantalum. There are many
applications where the red to yellow heat needed by tantalum
is undesirable. Other materials can also be used for
external plate tubes where the plate can not be run at high
temperatures. The change was made in the late 1940s but I
don't remember the exact year. It was at about the same time
that Eimac began to make and promote beam tetrode tubes.
They were properly afraid that the enormous number of triode
tubes supplied to the military during the war would come
back as surplus and kill their business so they held off on
the tetrodes until after the war and then concentrated on
them.
A patent search will show that Bill Eitel was the
brains behind both Eimac and Heintz & Kauffman.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11349. Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 20:20:31 UTC
From: Don Cunningham
Topic: 11318 Message: 11349

My pleasure, Matt. I can't recommend Tom too highly. His service and products are always excellent. No connection other than being friends, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11350. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 20:53:03 UTC
From: amfone
Topic: 11335 Message: 11350

On the burn in of 20 hours I may be wrong as it is from memory. However from memory in the last few years Eimac made the 3-500Z they were having a high tube failure rate after purchase.Their directions that came with the tube indicated the 20 hour warm up without applying RF. Again this is just from memory and being 25 or so years ago I could be wrong.

Tim
73
WB8uh

From: Richard Knoppow <1oldlens1@...m>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, January 13, 2013 1:28 PM
Subject: Re: [DrakeRadio] L4-B startup

----- Original Message -----
From: "Jim Shorney" jshorney@...>
To: DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 10:00 AM
Subject: Re: [DrakeRadio] L4-B startup

I've always been led to believe that it was zirconium
gettering material coated
on the plate that required the tubes to be run red.

http://en.wikipedia.org/wiki/Getter#Non-evaporable_getters

73

-Jim
NU0C

I have forgotten Eimac's name for the new plate material and couldn't find an ad for it just now. I think it is the new material that includes a zirconium coating for gettering. Tantalum is inherently a getter when hot. I don't think cost was the reason for the change but rather the operating conditions needed by tantalum. There are many applications where the red to yellow heat needed by tantalum is undesirable. Other materials can also be used for external plate tubes where the plate can not be run at high temperatures. The change was made in the late 1940s but I don't remember the exact year. It was at about the same time that Eimac began to make and promote beam tetrode tubes. They were properly afraid that the enormous number of triode tubes supplied to the military during the war would come back as surplus and kill their business so they held off on

the tetrodes until after the war and then concentrated on
them.
A patent search will show that Bill Eitel was the
brains behind both Eimac and Heintz & Kauffman.

--
Richard Knoppow
LosAngeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

11351. Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 21:12:55 UTC
From: Richard Knoppow
Topic: 11318 Message: 11351

----- Original Message -----
From: "Don Cunningham" <donc@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 12:20 PM
Subject: Re: [DrakeRadio] Replacing the 3-part electrolytic "can" capacitor on the TR-4 main chassis

> My pleasure, Matt. I can't recommend Tom too highly. His
> service and products are always excellent. No connection
> other than being friends, hi.
> 73,
> Don, WB5HAK
>

I will also vouch for Tom at Hayseed. I've bought can caps from him for both Drake and Hallicrafters sets. Well made and NEW not restuffed. These parts can make life a lot easier where can caps were used originally.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11352. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 21:28:36 UTC
From: Richard Knoppow
Topic: 11335 Message: 11352

----- Original Message -----
From: "amfone" <amfone20000@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 12:53 PM
Subject: Re: [DrakeRadio] L4-B startup

On the burn in of 20 hours I may be wrong as it is from
memory. However from memory in the last few years Eimac made
the 3-500Z they were having a high tube failure rate after
purchase.Their directions that came with the tube indicated
the 20 hour warm up without applying RF. Again this is just
from memory and being 25 or so years ago I could be wrong.

Tim
73
WB8uh

Its possible that the service notes may still be in
the Eimac archives. They do have some stuff on line at
whatever they are called now. I am a little skeptical about
the filament alone being able to absorb residual gas in the
tube but some filaments, in particular thoriated tungsten do
need to be run when emission is low to allow more thorium to
percolate to the surface. This may be something else
entirely.
Much gas in a tube will "poison" the filament causing a
severe loss of emission. Gas in general causes ionization
in the tube which allows conduction in a different manner
than electrons in a vacuum. Part of Eimac's success was the
knowledge of how to produce really hard vacuums.
As far as electrolytic caps go, there is a military
handbook which has a procedure for re-forming electrolytic
caps. It does require some time. The basic procedure is to
set the cap up on a variable DC power supply with means of
monitoring current. A good cap will come up with rather
high charging current which will fall off within a few
seconds as the cap becomes fully charged. The residual
current is the leakage caused by incomplete insulation of
the dielectric. This is normally higher in an electrolytic
cap than in other types. If the current does not fall to a
low level after a reasonable time for charging the
electrolytic electrode may need reforming. The voltage is
set low and allowed to sit there while the leakage current
is monitored. If the cap is reforming the leakage will
slowly fall. As it falls the voltage is increased.
Eventually, if the electrode does reform the cap will have

acceptable leakage current at full rated voltage. Of course
the capacitance should also be checked because it may have
changed due to whatever happens to the electrodes.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11353. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 21:41:33 UTC
From: Garey Barrell
Topic: 11335 Message: 11353

From -

"A History of EIMAC" Jack McCullough, ca 1974

"Tantalum was a different story. Eimac and H&K before it, had developed their reputations on tubes
that could 'take it.' Tantalum was the material that made this reputation possible. There was
something we had overlooked. Tantalum was a great getter when it was red hot; a lousy getter when
it was cold. Here was a paradox. Those customers that 'beat' their tubes thought Eimac tubes were
the greatest, but those customers that ran their tubes conservatively got very poor life. In the
search for long life, we finally eliminated all tantalum in our tubes. We substituted molybdenum,
coated at first with pure zirconium powder. Later we developed more rugged coating called Pyrovac
that was the best of both worlds. We still use Pyrovac in our tubes."

So I'm 50 years behind, so what else is new??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Jim Shorney" <jshorney@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, January 13, 2013 10:00 AM
> Subject: Re: [DrakeRadio] L4-B startup
>
>
>
> I've always been led to believe that it was zirconium
> gettering material coated
> on the plate that required the tubes to be run red.
>
> http://en.wikipedia.org/wiki/Getter#Non-evaporable_getters
>
> 73
>

> -Jim
> NU0C
>
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> applications where the red to yellow heat needed by tantalum
> is undesirable. Other materials can also be used for
> external plate tubes where the plate can not be run at high
> temperatures. The change was made in the late 1940s but I
> don't remember the exact year. It was at about the same time
> that Eimac began to make and promote beam tetrode tubes.
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> tubes supplied to the military during the war would come
> back as surplus and kill their business so they held off on
> the tetrodes until after the war and then concentrated on
> them.
> A patent search will show that Bill Eitel was the
> brains behind both Eimac and Heintz & Kauffman.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

11354. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 22:08:42 UTC
From: Garey Barrell
Topic: 11347 Message: 11354

Curt -

Performance is quite similar. Both are essentially the same design, with the 2-B having one less
conversion stage. The 2-B has crystal controlled converters ahead of a 3.5 - 4.1 MHz (VFO) tunable
1st IF, a 455 kHz 2nd IF, a 50 kHz IF with Passband tuning w/ 0.5, 2.1 and 3.6 kHz bandwidths,
Product Detector and Audio stages. All tube circuitry.

The R-4 has a crystal multiplied/PTO to a 1st IF of 5.645 MHz, a 455 kHz 2nd IF, a 50 kHz IF with
Passband tuning w/ 0.4, 1.2, 2.4 and 4.8 kHz bandwidths, Product Detector and Audio stages. All
tube circuitry.

So identical from the 2nd Mixer on, with the only 'real' differences of linear PTO tuning, one more
IF bandwidth, a Noise Blanker instead of a Noise Limiter, a Notch Filter and interoperability with
the T-4X transmitter.

Neither is intended for 'high fidelity' AM, with a sort of 'exalted carrier' being the only practical method. The 4.8 kHz bandwidth IS a little better for coming closer to the 5 kHz sideband
response of commercial AM, at least in the US.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

russellhulett wrote:
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> I own the first and have owned the latter, prefer the 2B from simplicity standpoint.
>
> 73, Curt KB5JO
>
>
>
> ------------------------------------

>
> Yahoo! Groups Links
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11355. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 23:55:11 UTC
From: Steve Wedge
Topic: 11335 Message: 11355

It's a crap-shoot. If you can bring old caps up gradually, you can keep them running for quite some time. I've done this with radios from the 1930's in the past.

Having said that, I will gladly sub in new caps in an antique radio while leaving the original cans visible from above. New caps are so cheap and so small that it's fairly easy to do most of the time. In the case of a REAL HV supply, though, I would look towards trying to re-form the caps in the L-4 supply but start lining up sources for replacing all the caps in the HV supply just due to the voltages involved. You might be able to milk a couple years out of them but the time will eventually come...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, January 13, 2013 10:54 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] L4-B startup

If the power supply caps don't 're-form' in the first couple of minutes, they aren't going to. If
they'do' seem to re-form, they won't last very long. (Probably not 20 hours!) :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Bernie wrote:
> I'm sure it is to re-form the power supply caps.
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> Bernie in ND
> WD0GMD
>
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> ----- Original Message -----
> From: Joe
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, January 13, 2013 3:52 AM
> Subject: Re: [DrakeRadio] L4-B startup
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> need it..if they are gassy, as soon as the tube comes to temp, the gassy
> problem is taken care of.
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> Joe - WA6RKN
>
> ----- Original Message -----
> From: "amfone" amfone20000@...>
> Subject: Re: [DrakeRadio] L4-B startup
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> Wayne
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> Turn on in the low tap position and do not apply power let it just run, see
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> zero and there is no plate current. Let it run at idle off and on for about
> 20 hours.
>
>

[Non-text portions of this message have been removed]

11356. Re: [DrakeRadio] Re: My T-4X Wants to Transmit!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 23:57:16 UTC
From: Steve Wedge
Topic: 11331 Message: 11356

Six bucks for a 6EV7 is a really good deal.

From what I've read, you do have some sort of issue with transmit control and it's conceivable that a gassy 6EV7 could be the source of your grief.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Carl Maniscalco
Sent: Sunday, January 13, 2013 12:10 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: My T-4X Wants to Transmit!

Okay, thanks for all your help. It didn't occur to me to mention that I'd already built the AC-4 with the kit from the Heathkit shop so I don't think that the bias is the problem. I have ordered a new 6EV7 VOX control tube (only $5.95 from Antique Electronics, seemed worth it) and will try all the other suggestions out.

73,

Carl, KJ6BSO

[Non-text portions of this message have been removed]

11357. Re: [DrakeRadio] Re: T4XC Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-13 23:59:07 UTC
From: Steve Wedge
Topic: 6245 Message: 11357

I believe that the PTO lights on the C-Line are simple DC levels from the switch.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Hanna
Sent: Sunday, January 13, 2013 12:30 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: T4XC Problem

Well, did a few things today. New 6EJ7, and replaced R114.

According to the counter I have 12.645Mhz getting to C29. Akso seeing it on the "bottom" pin of T3.

However, the grid and plate of the 6AU6 mixer seem to show the 5.645 freq. Note: Counter is an old Yaesu YC500 with input impedance of 1Mohm.

I tried another 6AU6, with no change. I checked the resistance of the T3 secondary, it's about 2 ohms.

I do see a little increase in plate current above the bias setting at 7Mhz, but see a bigger increase at the 5.6Mhz.

While in there, I did do the resistance and voltage checks, which, like you I don't totally rely on them, but they were close enough to the table to tell me it looks like the circuitry is intact. At one point I did try a new driver tube and finals too, with no change.

One interesting thing I noticed is with the "Transceve" switch in "recv" the PTO light does not go out. Not sure how (or if) that is connected to this problem, but I did notice that the 16MHZ crystal freq does go away, so probably something in that particular curcuit.

So, still not there, but looks to me like it is something happening in the mixer stage. I will do some more "poking" later.

The CD sure has been a help identifying where parts are. That was a good investment!

Thanks again for the help...

Dick Hanna
K3VYY

From: Garey Barrell k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Friday, January 11, 2013 9:13 PM
Subject: [DrakeRadio] Re: T4XC Problem

Dick -

Keep us posted!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Richard Hanna wrote:
> Thanks Gary for the quick reply. Well, I found a couple things. The output of the driver was 5645
> khz! I went to check the output of the PreMixer (6EJ7) and accidentally hit the switch on my
> counter making it low impedance, and when I connected to the plate of the 6EJ7, R114 let all the
> smoke out! I did check the 6EJ7 on my TV& tube tested and the output is really bad. Had a spare,
> so checked it and plugged it into the radio.
> So, I think I will give up for the day...I've been messing with it most of the day. I will replace
> the resistor probably Monday, and go back at it, but sounds like you are on the right track. I
> think I will check the continuity through the transformers while I am at it, and start again, but
> made more progress in the last hour that the last year (Hi!) And...I learned a little more how
> this thing works.
> Thanks again...will get back to you with what I find.
> Dick
> K3VYY
>
> *From:* Garey Barrell mailto:k4oah%40mindspring.com>
> *To:* Richard Hanna mailto:k3vyy%40yahoo.com>
> *Sent:* Friday, January 11, 2013 2:34 PM
> *Subject:* Re: T4XC Problem
>
> Hi Dick -
>
> That's definitely low on the CO, but I don't think that's where the problem lies.
>
> I have several of these 'projects' going a the moment, so forgive me if I repeat. We have the CO
> on frequency, we have the BAND oscillator on frequency so far as weknow. We're working on 40M, so
> if the PTO is set to 0.000, we should have 12.645 MHz at C29 on T3's secondary. This is

the
> PreMixer signal, and is derived from the BAND osc at 18.1 MHz and the PTO at 5.455 MHz.
>
> The fact that the RF TUNE is peaking well below 40M leads me to Figure 3-2 of the manual.
The
> curves here show that 'well below' the 40M band segment on the 40M band is in the range
of 5.645
> MHz. What happens here is that if the PreMixer (12.645 MHz) is NOT present, then the
Carrier Osc
> signal at 5.645 MHzis what you're peaking on. So check that the PreMixer (V8) DOES have
output at
> 12.645 MHz, and that it is present at C29.
>
> You should have a clean 7.000 MHz signal at the PLATE of V3 (at least 6 V p-p.) Ensure
that your
> PLATE trimmer cap of V3 is peaked on 7.000 and NOT 5.645 MHz! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> http://www.k4oah.com/>
>
>
>
>
>
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>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11358. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 00:09:02 UTC
From: Jim Wiley
Topic: 11335 Message: 11358

OK, stupid question time: I have a Drake L4-B that has been sitting for several years, and I want to bring it back on line. I think it would be prudent to simply replace all the caps in the HV supply, but the manual isn't handy at the moment (I do have one, somewhere).

So, what size are the caps, both electrically and physically? I will buy some new ones from Mouser or a similar place, but need to be sure I get the correct ones. Physically smaller is of course OK, as long as the electrical ratings are sufficient, and I know that modern caps are substantially better, so replacement seems prudent.

Second, the plastic blower wheel (the squirrel cage) is warped and in need of replacement. The motor is fine. I would prefer a metal wheel, but a good plastic one would do. Sources and make + model number info please?

- Jim, KL7CC

.

11359. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 00:56:54 UTC
From: Jim Shorney
Topic: 11335 Message: 11359

You might find this helpful:

http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/ElectrolyticRelacements.htm

73

-Jim
NU0C

On Sun, 13 Jan 2013 15:09:02 -0900, Jim Wiley wrote:

>OK, stupid question time: I have a Drake L4-B that has been sitting
>for several years, and I want to bring it back on line. I think it
>would be prudent to simply replace all the caps in the HV supply, but
>the manual isn't handy at the moment (I do have one, somewhere).

>So, what size are the caps, both electrically and physically? I will
>buy some new ones from Mouser or a similar place, but need to be sure I
>get the correct ones. Physically smaller is of course OK, as long as
>the electrical ratings are sufficient, and I know that modern caps are
>substantially better, so replacement seems prudent.

>Second, the plastic blower wheel (the squirrel cage) is warped and in
>need of replacement. The motor is fine. I would prefer a metal wheel,
>but a good plastic one would do. Sources and make + model number info
>please?

>- Jim, KL7CC

>.

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

11360. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 01:55:53 UTC
From: Jim Wiley
Topic: 11335 Message: 11360

Thanks for the info. Now to find the replacement squirrel cage for the fan.

- Jim, KL7CC

On 1/13/2013 3:56 PM, Jim Shorney wrote:
>
>
> You might find this helpful:
>
> http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/ElectrolyticRelacements.htm
>
> 73
>
> -Jim
> NU0C
>

[Non-text portions of this message have been removed]

11361. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:04:59 UTC
From: Richard Knoppow
Topic: 11335 Message: 11361

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 1:41 PM
Subject: Re: [DrakeRadio] L4-B startup

> From -
>
> "A History of EIMAC" Jack McCullough, ca 1974
>
> "Tantalum was a different story. Eimac and H&K before it,
> had developed their reputations on tubes
> that could 'take it.' Tantalum was the material that made
> this reputation possible. There was
> something we had overlooked. Tantalum was a great getter
> when it was red hot; a lousy getter when
> it was cold. Here was a paradox. Those customers that
> 'beat' their tubes thought Eimac tubes were
> the greatest, but those customers that ran their tubes
> conservatively got very poor life. In the
> search for long life, we finally eliminated all tantalum
> in our tubes. We substituted molybdenum,
> coated at first with pure zirconium powder. Later we
> developed more rugged coating called Pyrovac
> that was the best of both worlds. We still use Pyrovac in
> our tubes."
>
> So I'm 50 years behind, so what else is new??

Pyrovac is the stuff. I think tantalum was still used
for grids in some tubes because it has very low electron
emission.
Tube manufacture is amazing; all sorts of specialized
knowledge in many areas; metalurgy, glass technology,
machining, etc. The glass must be heat and strain resistant
and preferrably not adsorb gas on it surface or outgas. I
think Eimac used Nonex, a high termperature glass with very
low thermal cooefficient of expansion (Nonex= Non
Expanding) The reason is that the glass can get very hot
during use and can strain the seals causing cracks. Tubes
can develop micro-cracks that will allow air to get in over
time. Bill Eitel and Ralph Heintz were pioneers in
transmitting tubes as was Charlie Litton, who developed the
glass lathes used by all of the power tube manufacturers and
was responsible for the practical manufacture of the

Magnetron tube. These men, along with the Varian brothers
and Bill Hewlett and David Packard laid the foundation for
Silicon valley.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11362. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:12:16 UTC
From: Richard Knoppow
Topic: 11347 Message: 11362

```
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, January 13, 2013 2:08 PM
Subject: Re: [DrakeRadio] 2B vs R4

> Curt -
>
> Performance is quite similar. Both are essentially the
> same design, with the 2-B having one less
> conversion stage. The 2-B has crystal controlled
> converters ahead of a 3.5 - 4.1 MHz (VFO) tunable
> 1st IF, a 455 kHz 2nd IF, a 50 kHz IF with Passband tuning
> w/ 0.5, 2.1 and 3.6 kHz bandwidths,
> Product Detector and Audio stages. All tube circuitry.
>
> The R-4 has a crystal multiplied/PTO to a 1st IF of 5.645
> MHz, a 455 kHz 2nd IF, a 50 kHz IF with
> Passband tuning w/ 0.4, 1.2, 2.4 and 4.8 kHz bandwidths,
> Product Detector and Audio stages. All
> tube circuitry.
>
> So identical from the 2nd Mixer on, with the only 'real'
> differences of linear PTO tuning, one more
> IF bandwidth, a Noise Blanker instead of a Noise Limiter,
> a Notch Filter and interoperability with
> the T-4X transmitter.
>
> Neither is intended for 'high fidelity' AM, with a sort of
> 'exalted carrier' being the only
> practical method. The 4.8 kHz bandwidth IS a little
> better for coming closer to the 5 kHz sideband
> response of commercial AM, at least in the US.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>

FWIW AM broadcast stations are supposed to have good
response out to at least 10Khz. Current practice is to limit
response to 12 khz to prevent monkey chatter from highly
boosted high frequencies. Most modern broadcast
```

transmitters will modulate out to 15 khz and even very old ones were good to 10 khz. The main problem is the disgustingly bad audio fed into them. Broadcasters use far more processing than was ever used on transoceanic communications circuits. They want the modulation meter to sit at 100 even when there is no signal. Almost the only place one can hear reasonably good audio on an AM signal these days if from some short wave stations.
Actually, FM is not any better because most FM stations also use excessive processing.
My hearing has deteriorated to the point where I can no longer judge hi-fi but I can still tell how clippy and distorted most AM signals are.

BTW, the idea that AM stations were limited to 5khz probably came from the use of 5khz or less wire lines for network transmission. I think NBC may have used 8k lines in its grand days but am not sure.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11363. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:20:16 UTC
From: Jim Shorney
Topic: 11335 Message: 11363

That's been covered too, somewhere. Search the message archives for this group
and/or the Drakelist reflector and you will probably find it.

73

-Jim
NU0C

On Sun, 13 Jan 2013 16:55:53 -0900, Jim Wiley wrote:

>Thanks for the info. Now to find the replacement squirrel cage for the
>fan.

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11364. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:43:34 UTC
From: Dino Papas
Topic: 11335 Message: 11364

Jim - check out this fan rebuild:

http://www.wb4hfn.com/DRAKE/DrakeArticles/L4B-Fan/Drake%20Fan%20Replacement.pdf

I ended up getting a replacement fan on eBay and my 35 year old L-4B is nice and quiet again; was going to try the rebuild before I found the fan.

73 - Dino KL0S

11365. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:44:58 UTC
From: Charles Ring
Topic: 11347 Message: 11365

On 1/13/2013 2112, Richard Knoppow wrote:
>
>
> BTW, the idea that AM stations were limited to 5khz
> probably came from the use of 5khz or less wire lines for
> network transmission. I think NBC may have used 8k lines in
> its grand days but am not sure.
>

For some years now the FCC-required NRSC curve for AM stations cuts off response at 7.5 KHz, and more recently Clear Channel ordered its hundreds of AM stations to cut off everything above 5 KHz to avoid interference to the disastrously bad AM "IBOC" digital signals which no one except radio's corporate masters want. It hardly matters anyway since other corporate masters had already decreed that receivers reproduce hardly any more than telephone-quality audio on the AM band. We old-style hams with boatanchor receivers are the only ones left who know how good AM can sound, and no one else cares.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

11366. Re: L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:51:41 UTC
From: k5fex
Topic: 11335 Message: 11366

thanks everyone for their input. Lots of great ideas.

Went through the PS checking primary voltage setup to make sure it is set for 220VAC. All good. Much to my surprise, the PS has been upgraded with all new caps, resistors, and diodes.

did have a problem with the power switch being stuck in "ON". Used the rebuild procedure from WB4HFN site. Cleaned up the contacts in the switch. Working excellent.

Finalized the hookup to the C line with the relay cable, AGC line and coax. Having never operated amp before, the tune and operation procedure required study of the manual -:)

surprised by the amount of glow from the tubes! makes for pretty site. Feeding amp with 80 watts key down, produced a solid 600 from the amp. did not want to drive it hard just yet. Happy with the results!

Still have a mic audio issue. have not tested the mic amp (12AX7A) yet, but will. Using Astatic D-104 with fresh install of element from RBmicro. Mic works great with TR-4C plenty of audio, just not much audio drive for the T-4XC. will fire up the L-4B when have the audio issure figured out.

--- In DrakeRadio@yahoogroups.com, "k5fex" wrote:
>
> Have L-4B that has been sitting for about 5 years. Ready to get it up and going with the rest of the C line. Have 220V supply for the PS.
>
> Looking for suggestions on procedures for cold start and any operating ideas for its use.
>
> 73
> Wayne
> K5FEX
>

11367. Re: R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:57:19 UTC
From: k5fex
Topic: 594 Message: 11367

try to locate 5/16" automotive fuel line. it is rubber and just the right size to fit on the shafts. used it on my C-line. just cut to same length as the original spacer.

73,
Wayne
K5FEX

--- In DrakeRadio@yahoogroups.com, "Victor Waddington" wrote:
>
> Hi
> Here again - sorry to bore or burden you but Drakes are hard to come by
> in UK and spares even worse.
> I'm looking for a couple of the rubber doughnuts that fit on the tuning
> shaft behind the knob and ali plate for calibration purposes.
> Seems simple but getting hold of rubber piping to modify and replace
> the parts is nigh on impossible - everything is plastic these days.
> Tried every hardware store in the locality but zilch - same result from
> scrapyards - everything is damned plastic.
>
> Vic
>

11368. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 02:57:55 UTC
From: vacuuminded2@...
Topic: 11347 Message: 11368

FWIW, AM 740 out of Toronto still seems to have a reasonably decent sounding signal, they are also one of the seemingly few stations left broadcasting AM Stereo at night. If somebody on the list has means to actually analyze their signal on a clear night, (they are a clear channel 50kW station), I would be VERY interested to hear the results! I am in IL and regularly have Q5 copy... Aside from the occasional adjacent IBOC crap

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Jan 13, 2013, at 8:44 PM, Charles Ring <w3nu@...> wrote:

>
> On 1/13/2013 2112, Richard Knoppow wrote:
> >
> >
> > BTW, the idea that AM stations were limited to 5khz
> > probably came from the use of 5khz or less wire lines for
> > network transmission. I think NBC may have used 8k lines in
> > its grand days but am not sure.
> >
>
> For some years now the FCC-required NRSC curve for AM stations cuts off
> response at 7.5 KHz, and more recently Clear Channel ordered its
> hundreds of AM stations to cut off everything above 5 KHz to avoid
> interference to the disastrously bad AM "IBOC" digital signals which no
> one except radio's corporate masters want. It hardly matters anyway
> since other corporate masters had already decreed that receivers
> reproduce hardly any more than telephone-quality audio on the AM band.
> We old-style hams with boatanchor receivers are the only ones left who
> know how good AM can sound, and no one else cares.
>
> --
> *Charles Ring W3NU*
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11369. 12JB6A tubes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:07:50 UTC
From: k5fex
Topic: 11369 Message: 11369

somehow wound up with a pair of RCA 12JB6A sweep tubes. Anyone know what they would fit or use for them?

thanks,
Wayne
K5FEX

11370. Re: [DrakeRadio] 12JB6A tubes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:12:15 UTC
From: vacuuminded2@...
Topic: 11369 Message: 11370

Drake TR-3's or any other piece of 4 line gear with the filaments re-wired

Sent from my outdated iPhone wireless thingy

On Jan 13, 2013, at 9:07 PM, "k5fex" <oilieone@...> wrote:

> somehow wound up with a pair of RCA 12JB6A sweep tubes. Anyone know what they would fit or use for them?
>
> thanks,
> Wayne
> K5FEX
>
>

[Non-text portions of this message have been removed]

11371. Re: [DrakeRadio] 12JB6A tubes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:15:18 UTC
From: William Houghton
Topic: 11369 Message: 11371

A Drake TR-3 uses three of them.

From: k5fex <oilieone@...>
To: DrakeRadio@yahoogroups.com
Sent: Sun, January 13, 2013 7:07:56 PM
Subject: [DrakeRadio] 12JB6A tubes

somehow wound up with a pair of RCA 12JB6A sweep tubes. Anyone know what they would fit or use for them?

thanks,
Wayne
K5FEX

[Non-text portions of this message have been removed]

11372. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:25:27 UTC
From: Robert Logan
Topic: 11347 Message: 11372

They sound great on my NC-183D and a long wire.

Sent from my iPhone

On Jan 13, 2013, at 8:57 PM, vacuuminded2@... wrote:

FWIW, AM 740 out of Toronto still seems to have a reasonably decent sounding signal, they are also one of the seemingly few stations left broadcasting AM Stereo at night. If somebody on the list has means to actually analyze their signal on a clear night, (they are a clear channel 50kW station), I would be VERY interested to hear the results! I am in IL and regularly have Q5 copy... Aside from the occasional adjacent IBOC crap

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Jan 13, 2013, at 8:44 PM, Charles Ring w3nu@...> wrote:

>
> On 1/13/2013 2112, Richard Knoppow wrote:
> >
> >
> > BTW, the idea that AM stations were limited to 5khz
> > probably came from the use of 5khz or less wire lines for
> > network transmission. I think NBC may have used 8k lines in
> > its grand days but am not sure.
> >
>
> For some years now the FCC-required NRSC curve for AM stations cuts off
> response at 7.5 KHz, and more recently Clear Channel ordered its
> hundreds of AM stations to cut off everything above 5 KHz to avoid
> interference to the disastrously bad AM "IBOC" digital signals which no
> one except radio's corporate masters want. It hardly matters anyway
> since other corporate masters had already decreed that receivers
> reproduce hardly any more than telephone-quality audio on the AM band.
> We old-style hams with boatanchor receivers are the only ones left who
> know how good AM can sound, and no one else cares.
>
> --
> *Charles Ring W3NU*
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11373. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:49:33 UTC
From: n4buq
Topic: 11347 Message: 11373

On 1/13/2013 9:25 PM, Robert Logan wrote:
>
>> For some years now the FCC-required NRSC curve for AM stations cuts off
>> response at 7.5 KHz, and more recently Clear Channel ordered its
>> hundreds of AM stations to cut off everything above 5 KHz to avoid
>> interference to the disastrously bad AM "IBOC" digital signals which no
>> one except radio's corporate masters want. It hardly matters anyway
>> since other corporate masters had already decreed that receivers
>> reproduce hardly any more than telephone-quality audio on the AM band.
>> We old-style hams with boatanchor receivers are the only ones left who
>> know how good AM can sound, and no one else cares.
>>
>> --
>> *Charles Ring W3NU*
>>
>> [Non-text portions of this message have been removed]
>>
It's pathetic what passes for telephone sound quality these days. Folks
will grow up with cell phones and never know what its like to carry on a
phone telephone conversation that has decent audio.

Barry - N4BUQ

11374. Re: [DrakeRadio] 2B vs R4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 03:56:22 UTC
From: n4buq
Topic: 11347 Message: 11374

Sorry - that was not Robert's message below. It was one of his
responses I replied to but in cleaning up the reply, I didn't clip out
the first line. I should just have responded to Chris's original.

Barry - N4BUQ

> On 1/13/2013 9:25 PM, Robert Logan wrote:
>>> For some years now the FCC-required NRSC curve for AM stations cuts off
>>> response at 7.5 KHz, and more recently Clear Channel ordered its
>>> hundreds of AM stations to cut off everything above 5 KHz to avoid
>>> interference to the disastrously bad AM "IBOC" digital signals which no
>>> one except radio's corporate masters want. It hardly matters anyway
>>> since other corporate masters had already decreed that receivers
>>> reproduce hardly any more than telephone-quality audio on the AM band.
>>> We old-style hams with boatanchor receivers are the only ones left who
>>> know how good AM can sound, and no one else cares.
>>>
>>> --
>>> *Charles Ring W3NU*
>>>
>>> [Non-text portions of this message have been removed]
>>>
> It's pathetic what passes for telephone sound quality these days. Folks
> will grow up with cell phones and never know what its like to carry on a
> phone telephone conversation that has decent audio.
>
> Barry - N4BUQ

11375. Introduction KC9UNL

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 19:51:01 UTC
From: curtstamp
Topic: 11375 Message: 11375

Glad to join the group. I have just purchased a Drake 2B. Always wanted one of those receivers. I was first licensed in 1968 but let my license expire in the late 1990's. Since retired got the "bug" again and got re-licensed in 2011. In my last years of operation I had a Drake TR4C, R4C,T4XC. What great radios. Got a Icom 703 and a 718.
Don't have a lot of room in the condo, but would like to get a transmitter to run 50 watts for CW. I operate all modes but mostly CW, PSK31, and JT65.
Hopefully will learn more about the Drake equipment from this site. Also like to read about the older rigs and collect advertising and magazine articles.

73's

Curt

11376. Re: [DrakeRadio] Introduction KC9UNL

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-14 20:34:09 UTC
From: Garey Barrell
Topic: 11375 Message: 11376

Curt -

Welcome tothe group. The 2-B was one of the best receivers made by Drake, and while a bit of a
'minimalist' implementation, it can hold it's own with many modern receivers.

We used to sell the 2-B by tuning in a CW or SSB signal, then lifting the front of the receiver a
couple of inches above the table and dropping it. The 2-B was the only radio of the time that would
'boing' and come right back to where it was. Very impressive in a day when you couldn't walk across
the room with the 100 pound 'rock solid' Hallicrafter's would 'boing' with each step! :-)

The 2-NT would be a good, small CW transmitter that would work well with the 2-B, including SIDETONE, MUTE and ANTswitching capabilities. Another nice 'match' that I used in the 60's was the
Heath HX-20, a good size and shape match.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

curtstamp wrote:
> Glad to join the group. I have just purchased a Drake 2B. Always wanted one of those receivers. I was first licensed in 1968 but let my license expire in the late 1990's. Since retired got the "bug" again and got re-licensed in 2011. In my last years of operation I had a Drake TR4C, R4C,T4XC. What great radios. Got a Icom 703 and a 718.
> Don't have a lot of room in the condo, but would like to get a transmitter to run 50 watts for CW. I operate all modes but mostly CW, PSK31, and JT65.
> Hopefully will learn more about the Drake equipment from this site. Also like to read about the older rigs and collect advertising and magazine articles.
>
> 73's
>
> Curt
>
>

11377. Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 02:25:13 UTC
From: w5ida
Topic: 11377 Message: 11377

Does anyone have a source for the hard rubber feet used with the SW-4A SWL receiver? These are the same black rubber feet used with many pieces of Drake equipment. I have an SW-4A which I obtained with the feet missing, probably because it was rack mounted and removing the feet saved rack space.

Any help will be appreciated.

John, W5IDA

11378. Re: Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 03:04:25 UTC
From: wb8yxi@frontier.com
Topic: 11377 Message: 11378

Hi John,

I have replaced some rubber feet with the Radio Shack version and if they don't match, I replace all of them so the are all the same. They are fairly cheap and available.

Ski-WB8YXI-SW MI

--- In DrakeRadio@yahoogroups.com, "w5ida" wrote:
>
> Does anyone have a source for the hard rubber feet used with the SW-4A SWL receiver? These are the same black rubber feet used with many pieces of Drake equipment. I have an SW-4A which I obtained with the feet missing, probably because it was rack mounted and removing the feet saved rack space.
>
> Any help will be appreciated.
>
> John, W5IDA
>

11379. Re: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 03:18:46 UTC
From: Don Cunningham
Topic: 11377 Message: 11379

John,

Go to www.wb4hfn.com, look on his Drake page and you will find directions to several parts suppliers. One carries knobs, feet, etc to replace what was originally there. There are also MANY articles of interest on different Drake products.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11380. Re: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 04:22:26 UTC
From: Joe Pyles
Topic: 11377 Message: 11380

McMaster-Carr part number 95495K121

http://www.mcmaster.com/#adhesive-backed-bumpers/=l1gf1u

7/16 diameter black domed bumper, $7.88 for 121 of them.

73, Joe KC9LAD

At 10:18 PM 1/14/2013, you wrote:
>
>
>John,
>
>Go to www.wb4hfn.com, look on his Drake page and
>you will find directions to several parts
>suppliers. One carries knobs, feet, etc to
>replace what was originally there. There are
>also MANY articles of interest on different Drake products.
>73,
>Don, WB5HAK
>
>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11381. L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 12:26:49 UTC
From: k5fex
Topic: 11335 Message: 11381

Have the option of power up the L4-B with the panel power switch, or, use the C-4 Powermaster and leave the L-4B panel switch in the ON position. Have already gone through the power switch to repair arcing issues, plus the fact it was stuck in the ON position. Comments please? I use the C-4 to power up the C line already. Consensus on any side effects on powering up the amp as well? Seems to me the power inrush could be better handled by the contact in the Powermaster.

Wayne
K5FEX

11382. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 13:19:59 UTC
From: Steve Wedge
Topic: 11335 Message: 11382

The contactor is the way to go, Wayne. You just have to decide if you want the amp on every time you power up the station. If not, I would set up a secondary contactor powered by the power controller that you could switch separately.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jan 15, 2013, at 7:26 AM, "k5fex" <oilieone@...> wrote:

> Have the option of power up the L4-B with the panel power switch, or, use the C-4 Powermaster and leave the L-4B panel switch in the ON position. Have already gone through the power switch to repair arcing issues, plus the fact it was stuck in the ON position. Comments please? I use the C-4 to power up the C line already. Consensus on any side effects on powering up the amp as well? Seems to me the power inrush could be better handled by the contact in the Powermaster.
>
> Wayne
> K5FEX
>
>

[Non-text portions of this message have been removed]

11383. FS: Drake, Johnson, Nye, B&W, Kenwood

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-15 15:38:29 UTC
From: k9sqg
Topic: 11383 Message: 11383

For Sale:

DX Engineering speech processor, LC-2-T4X for Drake, with instructions. $100.

Drake 1525EM encoder microphone, new with box, $50.

Drake 7073, dynamic mobile mic, $25.

Drake line filter, LF2, model #1620, 8 A 120 vac, $25.

Nye Viking squeeze key paddle, New with box and instructions, chrome cover, mounted on Nye black base with space for manual key, $50.

Johnson Viking directional coupler, #250-24, one direction, New in box, $25.

B&W AT-200, 2 meter antenna switch with antenna tuner for using car antenna on 2 meters, New with box, $30.

Kenwood PC-1A phone patch, New in box, with instructions, $50

Shipping and insurance are extra. Continental US only. Thanks for reading the ad.
73,
Evan, K9SQG@...

11384. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 02:22:21 UTC
From: Jim Shorney
Topic: 11335 Message: 11384

Whatever you decide, always power the amp up in CW mode. The inrush is much lower than with the amp in SSB mode.

73

-Jim
NU0C

On Tue, 15 Jan 2013 12:26:49 -0000, k5fex wrote:

>Have the option of power up the L4-B with the panel power switch, or, use the C-4 Powermaster and leave the L-4B panel switch in the ON position. Have already gone through the power switch to repair arcing issues, plus the fact it was stuck in the ON position. Comments please? I use the C-4 to power up the C line already. Consensus on any side effects on powering up the amp as well? Seems to me the power inrush could be better handled by the contact in the Powermaster.
>
>Wayne
>K5FEX
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11385. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 02:47:00 UTC
From: Joe
Topic: 11335 Message: 11385

Damn Jim...that's a great idea...never ever gave that a thought. Would work with my Henry too!

Joe - WA6RKN

----- Original Message -----
From: "Jim Shorney" <jshorney@...>
Subject: Re: [DrakeRadio] L4-B startup

>
> Whatever you decide, always power the amp up in CW mode. The inrush is
> much
> lower than with the amp in SSB mode.

11386. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 02:52:40 UTC
From: Jim Shorney
Topic: 11335 Message: 11386

Yeah, I never gave it a thought either until I noticed it in action...

73

-Jim
NU0C

On Tue, 15 Jan 2013 18:47:00 -0800, Joe wrote:

>Damn Jim...that's a great idea...never ever gave that a thought. Would work
>with my Henry too!
>
>Joe - WA6RKN
>
>----- Original Message -----
>From: "Jim Shorney" <jshorney@...>
>Subject: Re: [DrakeRadio] L4-B startup
>
>
>>
>> Whatever you decide, always power the amp up in CW mode. The inrush is
>> much
>> lower than with the amp in SSB mode.
>
>

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

11387. Low audio drive in T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 12:24:40 UTC
From: k5fex
Topic: 11387 Message: 11387

Using D-104 mic with new element from RBMicro. Audio drive in T-4XC is very low when compared to TR-4C and using same mic. Evidence of the audio drive is fact that power output when communicating with the T-4XC (as seen on the wattmeter, non PEP meter BTW). Meter reads less than 15 watts on vocal peaks with 100 watts seen on TUNE/Key down. The TR-4C peaks at 35-40 watts out with same key down output as the T-4XC. My suspicion is the 12AX7A mic amp. Don't have a new tube in inventory yet. Has been ordered and is on the way.

Any other suggestions or ideas?

73
Wayne
K5FEX

11388. No AM reception with R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 17:42:14 UTC
From: w6mqi
Topic: 11388 Message: 11388

My R4C is acting rather strangely on AM the filter in the AM slot is(Fox Tango model: YF-56H6.0, freq:5645, No. 226). When I switch the mode switch to AM there's no audio, and the S-meter is moving just fine so it's receiving signals. If the AGC switch is switched to OFF audio is present, but very distorted and weak. I recently cleaned the mode switch with deoxit D100L then a shot of deoxit sheild S5 don't know if maybe I screwed something up or not, but SSB, and CW work just fine. I recently purchased this R4C so I don't know if AM ever worked or not never checked it before.

73,Dave

11389. Re: L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 12:19:56 UTC
From: k5fex
Topic: 11335 Message: 11389

All great information. Thanks all! Posting another question in a new topic. Feeble minds need fed.....

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" wrote:
>
> Yeah, I never gave it a thought either until I noticed it in action...
>
> 73
>
> -Jim
> NU0C
>
> On Tue, 15 Jan 2013 18:47:00 -0800, Joe wrote:
>
> >Damn Jim...that's a great idea...never ever gave that a thought. Would work
> >with my Henry too!
> >
> >Joe - WA6RKN
> >
> >----- Original Message -----
> >From: "Jim Shorney"
> >Subject: Re: [DrakeRadio] L4-B startup
> >
> >
> >>
> >> Whatever you decide, always power the amp up in CW mode. The inrush is
> >> much
> >> lower than with the amp in SSB mode.
> >
> >
>
> --
>
> "A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"
>

11390. Re: [DrakeRadio] L4-B startup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 15:05:39 UTC
From: GALE STEWARD
Topic: 11335 Message: 11390

I've installed this mod in both of my L4 amps to take the inrush stress off of the power switch. It works great!

http://www.w8zr.net/vintage/amplifiers/Drake%20L4B%20Modification/Drake%20L-4B%20Modification.htm

73, Stew K3ND

From: Jim Shorney <jshorney@inebraska.com>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Tuesday, January 15, 2013 9:52 PM
Subject: Re: [DrakeRadio] L4-B startup

Yeah, I never gave it a thought either until I noticed it in action...

73

-Jim
NU0C

On Tue, 15 Jan 2013 18:47:00 -0800, Joe wrote:

>Damn Jim...that's a great idea...never ever gave that a thought. Would work
>with my Henry too!
>
>Joe - WA6RKN
>

[Non-text portions of this message have been removed]

11391. Re: [DrakeRadio] Low audio drive in T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 17:07:12 UTC
From: Keith Evans
Topic: 11387 Message: 11391

Hi Wayne,
Your TR4C runs more power input than your T4XC, the PA has 3 tubes instead of 2. So it gives it about
30% more power.
With my voice, I get about the same 10-15w on avg.
FWIW
73
Keith G3VKW

----- Original Message -----
From: k5fex
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 16, 2013 12:24 PM
Subject: [DrakeRadio] Low audio drive in T-4XC

Using D-104 mic with new element from RBMicro. Audio drive in T-4XC is very low when compared to TR-4C and using same mic. Evidence of the audio drive is fact that power output when communicating with the T-4XC (as seen on the wattmeter, non PEP meter BTW). Meter reads less than 15 watts on vocal peaks with 100 watts seen on TUNE/Key down. The TR-4C peaks at 35-40 watts out with same key down output as the T-4XC. My suspicion is the 12AX7A mic amp. Don't have a new tube in inventory yet. Has been ordered and is on the way.

Any other suggestions or ideas?

73
Wayne
K5FEX

[Non-text portions of this message have been removed]

11392. Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 15:05:36 UTC
From: Garey Barrell
Topic: 11392 Message: 11392

Richard -

Quoting Jim, "as Garey said, transceiving on CW is a bad idea."

I believe Richard made a key statement. "From 1972 until the 80's I worked Heath SB 303/401 then the
Drake. I never had trouble with tranceiving cw or ssb on any rig and being close on frequency." The
reason this statement is 'almost' true is that essentially all the US made, tube based 'twins' sets
used the LSB position for transmitting CW.Coincidentally(?) this is about the time the solid state
rigs became competitive, and transceive became more of a way of life, EVEN on CW.

IF you set your Passband tuning or SIDEBAND selector for LSB reception, the system worked OK, with
the only variation being the ability of a particular operator to 'match' his tone to yours. OR his
willingness to accept YOUR choice of tone frequency. Most good CW ops have a preferred tone
frequencyor range, and most prefer considerably less than the ~1 kHz typical offset. So even at
best, transceive operation on CW was less than optimum.

The bottom line is that two stations in transceive _MUST_ be on _different_ frequencies! They
must be separated by the audio tone preferred by _TWO_ operators, and they may each be separated
in _TWO_ directions! This leaves us with several possible combinations, resulting in at least
eight (8) possible situations, i.e., either you're separated by the same amount in the same
direction, or up to twice as much in opposite directions.

I don't know why some manufacturers offset their CW signal toward USB, but they do, and therein lies
the rub. I don't know which way the TR-7 offsets, but I suspect it will be LSB. If so, then
setting your Passband tuning for LSB CW will get you close to other stations _who use USB for CW
generation_, but leave you twice the audio frequency away from those miscreants who insist
on using USB!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Hi Richard,
>
> I think the bottom line is that, as Garey said, transceiving on CW is a bad
> idea. We need to independently tune our receivers. I'm probably not a very good
> person to ask about casual operating, as most of my (sparse) CW work in recent
> years is working split trying to break through a pileup.
>
> What I'm reading in the manual is that, due to the shift, "it is possible to
> transmit on the received station's frequency without being zero beat while
> receiving". That makes sense. You want to transmit on his frequency, but if you
> zero beat, you will be off by the nominal 800 Hz offset. I also note that,
> under "Operating Near Band Edges", the manual states that the carrier is offset
> above the dial frequency. IIRC, this is backwards from what I said in earlier
> correspondence. I'm not sure if the error is in the owner's manual, the service
> manual, or the way I interpreted the numbers in the service manual. I'll have
> to investigate that.
>
> Anyway, it seems to me the big part of the problem lies in the plethora of
> different "standards" that the various manufacturers over the years have used
> for offsetting CW transmit in a transceiver. Particularly in that some radios
> use USB for CW reception, some use LSB, and some may actually change between
> the low and high bands (Garey, Floyd, any knowledge on that last point?).
>
> Here is the way I try to think about it whenever I have to. Knowing the
> direction and amount of the offset, I tune my dial for about an 800 Hz tone on
> the other guy, tuning in the direction that will place my offset transmit
> signal on his transmit frequency. This *should* put my transmitter reasonably
> close to zero beat with his transmitter. In theory, that should be the best
> chance of him hearing me. Then, using the RIT or the RV-7 as the case may be, I
> tune my receive for whatever tone I like. When looking for a station on a
> specific frequency, i.e. a DX spot, net, sked, it seems that the published
> frequency is usually the transmit frequency; I offset my dial in the proper
> direction to place my transmitter on frequency (or as close as I can get it
> within the limitations of the TR-7 digital display). If I don't hear who I want
> expect to hear, I go hunting with the RIT or RV-7.
>
> It's a pity that Drake didn't include a CW spot function in the TR-7. The
> pathetic PTO spot switch on the RV-7 is pretty much useless for anything at all
> (we call that "enhanced uselessness" in some computer circles). I wonder what
> would happen if the CW oscillator were turned on in RX. Hmmm....
>
> I hope this is helpful.
>
> 73
>
> -Jim
> NU0C
>
> On Tue, 15 Jan 2013 12:43:45 -0800 (PST), RICHARD NAUMANN wrote:
>

>> Hi again Jim
>>
>> I read the mails from the others who remarked about CW operation on the TR7, Dial and the TX offset and still find it hard to believe Drake would produce a rig in the 80's this hard to set up for transceiving cw. From 1972 until the 80's I worked Heath SB 303/401 then the Drake. I never had trouble with tranceiving cw or ssb on any rig and being close on frequency.
>>
>> I have the original instruction manual which I have read concerning CW xmit /rec operation. The manual states if you tune to zero beat his signal you will transmit where he is listening as he is offset normal cw pitch 700 Hz. Of course if I stayed zero beat then I will not hear him. The manual goes on saying to tune the TR7 to the 700Hz pitch and go to it. Meaning the other end would hear me at 7.065 (dial). Case in point ....I xmit with my Yaesu 847 on 7.065 (Dial) and I zero beat the TR7 at 7.065 (his carrier is 7.065) so to hear him I must tune down to 7.064.3 on the TR7 (for 700Hz. receive pitch). The manual says xmit from 7.064.3 and I will be where he is listening. When I transmit from that frequency I am not on his original dial tuned frequency of 7.065 but 1Kz higher his or my FT847 dial. So if I tune the TR7 down to 7.064 (1K below the original zero beat the FT847 now hears the 700 cw pitch but if he transmits back
>> again the The TR7 now hears a 1000Hz pitch.
>> If I leave the TR7 main dial at 7.064 and use RIT +300Hz. to where I hear him at 7064.3 it tranceives perfectly.
>> To me that means the TR7 CW oscillator or carrier TX offset adjustment circuit is not set for the 700 Hz offset but is 1K offset.
>> As I originally stated the guy that renewed rebuilt and alligned the TR7 has highest credentials on Drake radios from everyone on-line, still I can't believe any rig should be this hard to meet a calling station. Because of the hassle I've let my great TR7 languish on the desk and seldom using it
>>
>> If you got this far please share your thoughts with the others that responded and tell me what is wrong here.
>>
>> I appreciate the help given.
>> 73 Dick K8AB
>>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

>

11393. dial restringing nc-190

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 19:12:56 UTC
From: jim seeber
Topic: 11393 Message: 11393

Not a drake, but bought a nc-190 and need to restring the dialcord after
/if i repair the broken stuff(tnx usps). the pix in manual doesnt help.
wondering where the bandspread cap and main cap should be at as i have
to attach the red pointer somewhere on the trail also.
any help greatly appreciated,
jim kw3u

11394. Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 15:54:40 UTC
From: Floyd Sense
Topic: 11392 Message: 11394

On 1/16/2013 10:05 AM, Garey Barrell wrote:
> I don't know which way the TR-7 offsets, but I suspect it will be LSB.

For the TR7, it's USB. For most modern transceivers, two CW "modes" are used - UCW and LCW (!). In any case, the transceiver adjusts the offsets and BFOs accordingly and no matter which CW mode you use, you'll be on the right frequency. I agree on the problem with two operators using different offsets and the resulting slight differences in frequency.

That was always one of the strengths of the TR7 - you could simply use the passband tuning to peak an off-frequency calling station without having to use the RIT. In a contest, I could never remember to reset the RIT once tuned off center, but having the PBT tuned off of your normal listening offset is immediately apparent from the pitch of the background noise heard.

While transceive operation may not be the ultimate for CW operation, a CW contester today would not fare well by not using transceive mode.

73, Floyd

11395. RE: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 22:35:29 UTC
From: John King
Topic: 11377 Message: 11395

Thanks to all who responded to my request for information on cabinet feet. Many of you suggested ways of obtaining adhesive-backed, domed feet like the part whose URL appears below.

However, the feet on the SW-4A are cylindrical and held in place by a machine screw through the foot and cabinet and a nut on the inside of the cabinet. I would guess the feet to be about 3/4 inch in diameter and perhaps 1 inch in length. If someone knows where to get these feet, I would appreciate that information.

Thanks,
John King, W5IDA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Joe Pyles
Sent: Monday, January 14, 2013 11:22 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

McMaster-Carr part number 95495K121

http://www.mcmaster.com/#adhesive-backed-bumpers/=l1gf1u

7/16 diameter black domed bumper, $7.88 for 121 of them.

73, Joe KC9LAD

At 10:18 PM 1/14/2013, you wrote:
>
>
>John,
>
>Go to www.wb4hfn.com, look on his Drake page and
>you will find directions to several parts
>suppliers. One carries knobs, feet, etc to
>replace what was originally there. There are
>also MANY articles of interest on different Drake products.
>73,
>Don, WB5HAK
>
>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11396. Re: [DrakeRadio] No AM reception with R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 20:14:11 UTC
From: Garey Barrell
Topic: 11388 Message: 11396

Dave -

Check filter, replace with ~hundreds ohm, 2W resistor between hot leads.

Verify that 5595 kHz 3rd Mixer LO is running.

Q6 is AM Detector, Gets +10V via S2A (Front)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> My R4C is acting rather strangely on AM the filter in the AM slot is(Fox Tango model: YF-56H6.0, freq:5645, No. 226). When I switch the mode switch to AM there's no audio, and the S-meter is moving just fine so it's receiving signals. If the AGC switch is switched to OFF audio is present, but very distorted and weak. I recently cleaned the mode switch with deoxit D100L then a shot of deoxit sheild S5 don't know if maybe I screwed something up or not, but SSB, and CW work just fine. I recently purchased this R4C so I don't know if AM ever worked or not never checked it before.
>
> 73,Dave
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11397. RE: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 23:54:02 UTC
From: Wayne Smith
Topic: 11377 Message: 11397

The ¼☐ diameter rubber pieces fit on the bottom of the feet you are describing. Both can be found at Nationwide Radio & equipment Sales. I☐ve purchased both parts from them.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of John King
Sent: Wednesday, January 16, 2013 4:35 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

Thanks to all who responded to my request for information on cabinet feet. Many of you suggested ways of obtaining adhesive-backed, domed feet like the part whose URL appears below.

However, the feet on the SW-4A are cylindrical and held in place by a machine screw through the foot and cabinet and a nut on the inside of the cabinet. I would guess the feet to be about 3/4 inch in diameter and perhaps 1 inch in length. If someone knows where to get these feet, I would appreciate that information.

Thanks,
John King, W5IDA

From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On
Behalf Of Joe Pyles
Sent: Monday, January 14, 2013 11:22 PM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] Re: Rubber Feet for Drake SW-4A

McMaster-Carr part number 95495K121

http://www.mcmaster.com/#adhesive-backed-bumpers/=l1gf1u

7/16 diameter black domed bumper, $7.88 for 121 of them.

73, Joe KC9LAD

At 10:18 PM 1/14/2013, you wrote:
>
>

>John,
>
>Go to www.wb4hfn.com, look on his Drake page and
>you will find directions to several parts
>suppliers. One carries knobs, feet, etc to
>replace what was originally there. There are
>also MANY articles of interest on different Drake products.
>73,
>Don, WB5HAK
>
>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11398. Re: [DrakeRadio] No AM reception with R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 23:35:03 UTC
From: Richard Knoppow
Topic: 11388 Message: 11398

----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, January 16, 2013 9:42 AM
Subject: [DrakeRadio] No AM reception with R4C

> My R4C is acting rather strangely on AM the filter in the
> AM slot is(Fox Tango model: YF-56H6.0, freq:5645, No.
> 226). When I switch the mode switch to AM there's no
> audio, and the S-meter is moving just fine so it's
> receiving signals. If the AGC switch is switched to OFF
> audio is present, but very distorted and weak. I recently
> cleaned the mode switch with deoxit D100L then a shot of
> deoxit sheild S5 don't know if maybe I screwed something
> up or not, but SSB, and CW work just fine. I recently
> purchased this R4C so I don't know if AM ever worked or
> not never checked it before.
>
> 73,Dave
>
Check around Q-6 and CR-4. This is the AM detector. Its
could be a bad diode or transistor but its not a complex
circuit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11399. Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 00:52:35 UTC
From: curtstamp
Topic: 11399 Message: 11399

Does anyone have any experience in using a VFO with the Drake 2NT? Brand of VFO or where you got a schematic to build one? Thanks for the reply.

Also looking for Electric radio articles about the Drake 2B in
#185 Oct 2004 and #51 JY 93.

11400. Re: [DrakeRadio] Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 01:48:04 UTC
From: Whitebear
Topic: 11399 Message: 11400

Hands down, the Eico 722 was absolutely fabulous with my 2NT! It looked great, hooked up easily. 73 Scott WA9WFA
Sent from my iPhone

On Jan 16, 2013, at 6:52 PM, "curtstamp" <Curtstamp@...> wrote:

> Does anyone have any experience in using a VFO with the Drake 2NT? Brand of VFO or where you got a schematic to build one? Thanks for the reply.
>
> Also looking for Electric radio articles about the Drake 2B in
> #185 Oct 2004 and #51 JY 93.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

11401. Re: [DrakeRadio] Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 02:04:56 UTC
From: Don Cunningham
Topic: 11399 Message: 11401

I can't answer your VFO question, but Electric Radio past issues can be purchased directly from ER for a very nominal fee.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11402. Re: [DrakeRadio] Low audio drive in T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-16 15:38:35 UTC
From: Garey Barrell
Topic: 11387 Message: 11402

Wayne -

Have you turned up the GAIN control? Whistling into the MIC should produce the same output as TUNE
mode.

The 12AX7 generates the TUNE mode signal, so doubtful that the tube is weak.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k5fex wrote:
> Using D-104 mic with new element from RBMicro. Audio drive in T-4XC is very low when compared to TR-4C and using same mic. Evidence of the audio drive is fact that power output when communicating with the T-4XC (as seen on the wattmeter, non PEP meter BTW). Meter reads less than 15 watts on vocal peaks with 100 watts seen on TUNE/Key down. The TR-4C peaks at 35-40 watts out with same key down output as the T-4XC. My suspicion is the 12AX7A mic amp. Don't have a new tube in inventory yet. Has been ordered and is on the way.
>
> Any other suggestions or ideas?
>
> 73
> Wayne
> K5FEX
>
>

11403. Re: No AM reception with R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 05:40:36 UTC
From: w6mqi
Topic: 11388 Message: 11403

Hey Guys
Thanks for the info, I just found the problem bad solder connections on Q6 easy fix this time!!! cool I'm happy no month long troubleshooting event YIPPE SKIPPY :-)

73,Dave

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "w6mqi"
> To:
> Sent: Wednesday, January 16, 2013 9:42 AM
> Subject: [DrakeRadio] No AM reception with R4C
>
>
> > My R4C is acting rather strangely on AM the filter in the
> > AM slot is(Fox Tango model: YF-56H6.0, freq:5645, No.
> > 226). When I switch the mode switch to AM there's no
> > audio, and the S-meter is moving just fine so it's
> > receiving signals. If the AGC switch is switched to OFF
> > audio is present, but very distorted and weak. I recently
> > cleaned the mode switch with deoxit D100L then a shot of
> > deoxit sheild S5 don't know if maybe I screwed something
> > up or not, but SSB, and CW work just fine. I recently
> > purchased this R4C so I don't know if AM ever worked or
> > not never checked it before.
> >
> > 73,Dave
> >
> Check around Q-6 and CR-4. This is the AM detector. Its
> could be a bad diode or transistor but its not a complex
> circuit.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

11404. Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 04:53:32 UTC
From: bobnohren
Topic: 11404 Message: 11404

Is there a way to get this new technology into a Drake R-4B/T-4XB?

11405. Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 14:31:58 UTC
From: floydsense
Topic: 11404 Message: 11405

--- In DrakeRadio@yahoogroups.com, "bobnohren" wrote:
>
> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>
Conceptually, yes. Here's how I'd approach the problem - there are other ways, including use of a Softrock receiver, but this is what I prefer:

1. Obtain the first IF signal (believe that's 5.645 MHz) via a tap before any filters and use a Clifton Laboratories buffer amplifier kit mounted inside the R4B near the tap.

2. Contact N8LP and ask Larry if he can provide the parts or values for his LP-Pan unit to be able to handle the 5.645 MHz input (I assume this is possible)

3. Obtain one of the recommended sound cards that work well with LP-Pan - that will allow you to see up to 192 KHz of the band in one sweep - that's a lot.

4. Obtain the free NaP3 panadaptor software that works with LP-Pan. That will provide all the panadaptor function including waterfall, etc.

Since there's no way to obtain frequency information from the Drake, you'll end up with NaP3 showing you the entire IF bandwidth and you'll have to play with NaP3 to determine exactly where the center is. After that, you can configure NaP3 to show the frequency as plus and minus offsets from that center. You'll be able to zoom in from the 192 KHz width to as little as 1 KHz.

You'll be tempted to use other software approaches and they're all inferior to NaP3 for the panadaptor function.

If the LP-Pan can't be adapted to the R4B IF frequency, another equally good approach (but more expensive) is to use an SDR-IQ receiver from RF-Space along with its companion software. The SDR-IQ will handle the Drake IF frequency just fine. I can't recall whether or not you can configure the software to show you plus and minus offsets from the center. You could get the software ahead of time and check that out.

Another approach (cheaper) is to use one of the Softrock receivers. If you don't mind spending the time to get and keep all the associated pieces running properly, this might work for you. If you want a solution that works better and doesn't require ongoing effort, use one of the other approaches.

73, Floyd - K8AC

11406. Re: [DrakeRadio] Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 15:20:57 UTC
From: Garey Barrell
Topic: 11404 Message: 11406

Bob -

Certainly. Floyd has done an excellent description of the 'Mercedes' approach that will 'almost'
plug and play. Unfortunately, it ends up costing more than you paid for the B-Line! :-)

Depending upon your interests, skills and financial situation, you might consider that basic layout,
except substituting the $20 (twenty) Softrock single band receiver in place of theLP/Pan. This is
still a kit, and is available with a crystal for your specified IF.

<http://www.wb5rvz.org/>

The preamp in the R-4B is a good idea, but the system will work without it 'almost' as well. I'm
sure there are other weaknesses in the Softrock approach, but assuming you have a decent computer it
will give you at least a 96 kHz wide panadapter for a LOT less investment. Stretching that 96 kHz
b/w to 192 kHz will almost certainly require a new sound card ($100+) for most computers, and do you
really need to know what's going on more than 50 kHz away from your frequency.

So if money is no object, Floyd's system is terrific and will work with very little effort. The
Softrock approach will ALSO work quite well, but with a little more effort, (and learning!) There is
some small toroid winding, and surface mount components involved, but I'm 70 and my hands are quite
shaky after my last 'hospital experience', so pretty much anyone can do it. I solderentire boards
at once with an 'embosser' heat gun from Michaels craft store. Some use an electric skillet or
toaster oven.

Of course you could just get the $70 1.5-30 MHz continuouscoverage receiver kit from Softrock and
dispense with the R-4B. The 'Ensemble II' does NOT have a front end that will stand up to contest
QRM, but in today's uncrowded bands it does quite well.

<fivedash.com>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

bobnohren wrote:
> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>
>
>

11407. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 17:27:20 UTC
From: JD Reich
Topic: 10991 Message: 11407

Good Morning Glen,

Sorry for the delayed response; have just gotten around to testing. Thank you for your help thus far; this is my first time working on this Drake, so please bear with my ignorance, i.e, capacitor C79. :)

I tested the ac-4 and am getting proper voltage to all pins

I put in the new a02 tube, and am getting 149.9 voltage to pin 1

The tubes, v1, v5 and v13 are warm and have a slight glow.

Some history; I put a new coax input on, however the inner metal sleeve was too long, shorting out with a wire just inside the rig, behind the coax input, I believe putting the rig into transmit; by the time I realized this, it was 30-40 seconds so unsure if this might have caused a problem. I was getting receive after this however.

I also attempted to tune on AM using a keyer, but hindsight, I don't believe I had the correct adapter for the key to match this Drake; perhaps that shorted something?

Prior to this night, it was receiving and transmitting fine; with the exception of a bad so-239 input was gave intermittent and scratchy receive at times. It would also have low transmit after some transmissions, which is why I replaced the c5 in the ac-4. Other than that, it was tuning up and receiving.

Now, I cannot get receive or power out.

The finals all have a glow to them.

Any suggestions on the next step?

thank you
JD-W0AJC

On Tue, Dec 18, 2012 at 10:05 PM, Garey Barrell <k4oah@mindspring.com>wrote:

> **
>
>
> JD -
>
> If you are referring to the small white object near the center of your
> photo, that is a capacitor, C79.
>
> The 0A2 is a shunt regulator. It works by shunting current to ground to

> drop the necessary voltage
> across R112. Turning the transceiver on with some tubes removed, or if the
> PTO is disconnected can
> cause the 0A2 to be overloaded, in which case it will flash brightly and
> eventually 'burn out'.
> Turning the transceiver on withthe 0A2 either dead or removed willoverload
> the Zener (also a shunt
> regulator) inside the PTO to be overloaded.
>
> Changing C5 would NOT affect theoperation of the 0A2, and vice versa.
> There is no relationship
> between those two circuits.
>
> When you get your new 0A2, plug it in, and make sure that all other tubes
> are in their sockets. Then
> turn on the radio and monitor the voltage on Pin 1 of the 0A2. IF this is
> NOT very close to +150, or
> if the new tube is flashing, shut down the radio immediately. Verify that
> the tubes in V1, V5 and
> V13 are warm.
>
> If the voltage at Pin 1 IS very close to +150, then verify normal
> operation.
>
> Otherwise, further troubleshooting will be necessary.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> jdreich79 wrote:
> > Hello,
> >
> > I have a Drake TR-4 which I have been using and was working well in
> receive and transmit,full power out however I was getting intermittent low
> receive after transmitting. I replaced the c5 capacitor in the AC-4 and
> cleaned the transmit relay.
> > In the process of cleaning, I tapped the A02 tube and after reinstall,
> it began glowing brightly and burnt out. I have one on order.
> > In looking at the bottom of the rig, I see this white resistor. Is this
> burnt out? Most likely unrelated, but I am trying to go through and make
> visual inspection prior to getting the A02 tube in the mail.
> > Thank you in advance
> > JD
> >
> > http://i838.photobucket.com/albums/zz305/rico559/photo2_zpseac0de21.jpg
> >

> >
> >
>
>
>

[Non-text portions of this message have been removed]

11408. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 17:27:35 UTC
From: JD Reich
Topic: 10991 Message: 11408

Sorry, Garey

On Thu, Jan 17, 2013 at 11:27 AM, JD Reich <jdreich79@gmail.com> wrote:

> Good Morning Glen,
>
> Sorry for the delayed response; have just gotten around to testing. Thank
> you for your help thus far; this is my first time working on this Drake, so
> please bear with my ignorance, i.e, capacitor C79. :)
>
> I tested the ac-4 and am getting proper voltage to all pins
>
> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>
> The tubes, v1, v5 and v13 are warm and have a slight glow.
>
> Some history; I put a new coax input on, however the inner metal sleeve
> was too long, shorting out with a wire just inside the rig, behind the coax
> input, I believe putting the rig into transmit; by the time I realized
> this, it was 30-40 seconds so unsure if this might have caused a problem. I
> was getting receive after this however.
>
> I also attempted to tune on AM using a keyer, but hindsight, I don't
> believe I had the correct adapter for the key to match this Drake; perhaps
> that shorted something?
>
> Prior to this night, it was receiving and transmitting fine; with the
> exception of a bad so-239 input was gave intermittent and scratchy receive
> at times. It would also have low transmit after some transmissions, which
> is why I replaced the c5 in the ac-4. Other than that, it was tuning up and
> receiving.
>
> Now, I cannot get receive or power out.
>
>
> The finals all have a glow to them.
>
> Any suggestions on the next step?
>
> thank you
> JD-W0AJC
>
>
> On Tue, Dec 18, 2012 at 10:05 PM, Garey Barrell <k4oah@mindspring.com>wrote:
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>> JD -
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>> If you are referring to the small white object near the center of your
>> photo, that is a capacitor, C79.
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>> The 0A2 is a shunt regulator. It works by shunting current to ground to
>> drop the necessary voltage
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>> the tubes in V1, V5 and
>> V13 are warm.
>>
>> If the voltage at Pin 1 IS very close to +150, then verify normal
>> operation.
>>
>> Otherwise, further troubleshooting will be necessary.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> jdreich79 wrote:
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>> visual inspection prior to getting the A02 tube in the mail.
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[Non-text portions of this message have been removed]

11409. Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 18:46:16 UTC
From: floydsense
Topic: 11404 Message: 11409

Can't quite agree with all that. N8LP has done a superb job with LP-Pan in getting rid of all the situations that cause phantom signals on the panadaptor display. If all you want to do is see things wiggle on the screen, then the cheaper approaches will work.

I agree that 192 KHz isn't used all that much, but, if the approach doesn't have that bandwidth, that's the first thing guys complain about. There are other problems with cheap or built-in soundcards, like a phantom spike exactly in the middle of your passband, just where you will often be looking. Nothing wrong with starting out with the Softrock approach - that's what I did. But, the other approaches result in a first rate result.

Whatever you do, you will still need the Clifton Labs buffer amp (it also performs an isolation function, keeping outside stuff out of the receiver IF strip) to prevent your tap from affecting the IF signal level. And - you can still use NaP3 (free) which is derived from PowerSDR by FlexRadio. No matter what one things about Flex, the PowerSDR approach to a panadaptor is excellent. That leaves the LP-Pan and a decent sound card. I often see the pair advertised on QTH.com for $200 or less. If that doesn't work out for you, you can always sell it for what you paid for it.

A lesser soundcard will likely also result in a non-linear baseline for the trace. In other words, the baseline, instead of being nearly flat, may have a hump in the middle or tilt from one end to the other.

No matter how you approach it, it should be a fun experiment and worth doing.

73, Floyd
--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Bob -
>
> Certainly. Floyd has done an excellent description of the 'Mercedes' approach that will 'almost'
> plug and play. Unfortunately, it ends up costing more than you paid for the B-Line! :-)
>
> Depending upon your interests, skills and financial situation, you might consider that basic layout,
> except substituting the $20 (twenty) Softrock single band receiver in place of theLP/Pan. This is
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>
>
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> The preamp in the R-4B is a good idea, but the system will work without it 'almost' as well. I'm
> sure there are other weaknesses in the Softrock approach, but assuming you have a decent computer it
> will give you at least a 96 kHz wide panadapter for a LOT less investment. Stretching

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> really need to know what's going on more than 50 kHz away from your frequency.
>
> So if money is no object, Floyd's system is terrific and will work with very little effort. The
> Softrock approach will ALSO work quite well, but with a little more effort, (and learning!) There is
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> shaky after my last 'hospital experience', so pretty much anyone can do it. I solderentire boards
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> dispense with the R-4B. The 'Ensemble II' does NOT have a front end that will stand up to contest
> QRM, but in today's uncrowded bands it does quite well.
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> bobnohren wrote:
> > Is there a way to get this new technology into a Drake R-4B/T-4XB?
> >
> >
> >
>

11410. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 18:47:02 UTC
From: Garey Barrell
Topic: 10991 Message: 11410

JD -

OK. Let's try again.

Confirm that slide switch on left side near rear is in 'TCVR' position.

Always tune the transmitter in X-CW position, with filter switch set to 'X'. A key is not necessary
and should NOT be plugged in.

Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of PLATE current. If so, then
increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an increase in current, then quickly
dipthe PLATE control for minimum current.

If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA circuit is not complete and
will need further troubleshooting.

If PLATE current does NOT increase when XMTR GAIN is increased, then one or more oscillators are not
running, or alignment is seriously maladjusted.

DeoxIT or alcoholif that's all that you have applied to a strip of heavy paper, file card or
business card drawn through relay contacts may help. The contact on top, just to left of center, is
the Receive contact. Insert paper and slowly withdraw. Card will probably show black stripe.
Continue until stripe no longer appears.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

JD Reich wrote:
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> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
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> The tubes, v1, v5 and v13 are warm and have a slight glow.
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> Some history; I put a new coax input on, however the inner metal sleeve was
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>
> I also attempted to tune on AM using a keyer, but hindsight, I don't
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>
> Prior to this night, it was receiving and transmitting fine; with the
> exception of a bad so-239 input was gave intermittent and scratchy receive
> at times. It would also have low transmit after some transmissions, which
> is why I replaced the c5 in the ac-4. Other than that, it was tuning up and
> receiving.
>
> Now, I cannot get receive or power out.
>
>
> The finals all have a glow to them.
>
> Any suggestions on the next step?
>
> thank you
> JD-W0AJC
>

11411. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 19:13:04 UTC
From: Garey Barrell
Topic: 11404 Message: 11411

Floyd -

I'm not disparaging the LP-Panor the rest of your description at all. Definitely the first class
approach that will result in a very nice system.

However! (There's always a however...) The last time I looked at the LP-Pan it was $250 by itself.
I think the preamp was another $30.''

The center spike can be offset to either end of the passband, eliminating the ~$100 for a decent
sound card, again at least to start.

I must say that seeing the LP-Pan / soundcard pair advertised for '$200 or less' is a bit disturbing?!? Dis-satisfaction, disappointmentor boredom?? Makes the $20 Softrock approach seem a
little more desirable! :-)

Again, I'm not saying that the LP-Pan isn't a 'better' way to do it, just a much less expensive way
to 'try it out' to see if you really want/need it.

I'm a contrarian in that I get my kicks out of putting the pieces together and making it all work.
But once it's all together, (and usually available as a package from HRO,) I lose interest! :-) I
was one of the first four stations on packet radio in Atlanta a bunch of years ago, but once it was
all kitted up and all the repeater networks were active, I quickly lost interest.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

floydsense wrote:
> Can't quite agree with all that. N8LP has done a superb job with LP-Pan in getting rid of all the situations that cause phantom signals on the panadaptor display. If all you want to do is see things wiggle on the screen, then the cheaper approaches will work.
>
> I agree that 192 KHz isn't used all that much, but, if the approach doesn't have that bandwidth, that's the first thing guys complain about. There are other problems with cheap or built-in soundcards, like a phantom spike exactly in the middle of your passband, just where you will often be looking. Nothing wrong with starting out with the Softrock approach

- that's what I did. But, the other approaches result in a first rate result.
>
> Whatever you do, you will still need the Clifton Labs buffer amp (it also performs an isolation function, keeping outside stuff out of the receiver IF strip) to prevent your tap from affecting the IF signal level. And - you can still use NaP3 (free) which is derived from PowerSDR by FlexRadio. No matter what one things about Flex, the PowerSDR approach to a panadaptor is excellent. That leaves the LP-Pan and a decent sound card. I often see the pair advertised on QTH.com for $200 or less. If that doesn't work out for you, you can always sell it for what you paid for it.
>
> A lesser soundcard will likely also result in a non-linear baseline for the trace. In other words, the baseline, instead of being nearly flat, may have a hump in the middle or tilt from one end to the other.
>
> No matter how you approach it, it should be a fun experiment and worth doing.
>
> 73, Floyd
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Bob -
>>
>> Certainly. Floyd has done an excellent description of the 'Mercedes' approach that will 'almost'
>> plug and play. Unfortunately, it ends up costing more than you paid for the B-Line! :-)
>>
>> Depending upon your interests, skills and financial situation, you might consider that basic layout,
>> except substituting the $20 (twenty) Softrock single band receiver in place of theLP/Pan. This is
>> still a kit, and is available with a crystal for your specified IF.
>>
>>
>>
>> The preamp in the R-4B is a good idea, but the system will work without it 'almost' as well. I'm
>> sure there are other weaknesses in the Softrock approach, but assuming you have a decent computer it
>> will give you at least a 96 kHz wide panadapter for a LOT less investment. Stretching that 96 kHz
>> b/w to 192 kHz will almost certainly require a new sound card ($100+) for most computers, and do you
>> really need to know what's going on more than 50 kHz away from your frequency.
>>
>> So if money is no object, Floyd's system is terrific and will work with very little effort. The
>> Softrock approach will ALSO work quite well, but with a little more effort, (and learning!) There is
>> some small toroid winding, and surface mount components involved, but I'm 70 and my hands are quite
>> shaky after my last 'hospital experience', so pretty much anyone can do it. I solderentire boards
>> at once with an 'embosser' heat gun from Michaels craft store. Some use an electric

skillet or
>> toaster oven.
>>
>> Of course you could just get the $70 1.5-30 MHz continuouscoverage receiver kit from Softrock and
>> dispense with the R-4B. The 'Ensemble II' does NOT have a front end that will stand up to contest
>> QRM, but in today's uncrowded bands it does quite well.
>>
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> bobnohren wrote:
>>> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>>>
>>>

11412. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 19:36:21 UTC
From: JD Reich
Topic: 10991 Message: 11412

Thank you Garey,

I did confirm that the switch was switched to TCVR; it was and I switched it back and forth; this was working prior to these problems.

I did get a 0.1A plate current, but when I increased XMTR gain, the current remained at 0.1a on 80, 20.

I also cleaned the relay contact points with DeOxit, and they were a bit dirty, but this did not help this particular problem.

As far as the oscillators go, to determine if they are running or misaligned, what would the next step be?

thank you again and 73
JD - W0AJC

On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> JD -
>
> OK. Let's try again.
>
> Confirm that slide switch on left side near rear is in 'TCVR' position.
>
> Always tune the transmitter in X-CW position, with filter switch set to
> 'X'. A key is not necessary
> and should NOT be plugged in.
>
> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of
> PLATE current. If so, then
> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an increase
> in current, then quickly
> dipthe PLATE control for minimum current.
>
> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
> circuit is not complete and
> will need further troubleshooting.
>
> If PLATE current does NOT increase when XMTR GAIN is increased, then one
> or more oscillators are not
> running, or alignment is seriously maladjusted.
>
> DeoxIT or alcoholif that's all that you have applied to a strip of heavy

> paper, file card or
> business card drawn through relay contacts may help. The contact on top,
> just to left of center, is
> the Receive contact. Insert paper and slowly withdraw. Card will probably
> show black stripe.
> Continue until stripe no longer appears.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> JD Reich wrote:
> > Good Morning Glen,
> >
> > Sorry for the delayed response; have just gotten around to testing. Thank
> > you for your help thus far; this is my first time working on this Drake,
> so
> > please bear with my ignorance, i.e, capacitor C79. :)
> >
> > I tested the ac-4 and am getting proper voltage to all pins
> >
> > I put in the new a02 tube, and am getting 149.9 voltage to pin 1
> >
> > The tubes, v1, v5 and v13 are warm and have a slight glow.
> >
> > Some history; I put a new coax input on, however the inner metal sleeve
> was
> > too long, shorting out with a wire just inside the rig, behind the coax
> > input, I believe putting the rig into transmit; by the time I realized
> > this, it was 30-40 seconds so unsure if this might have caused a
> problem. I
> > was getting receive after this however.
> >
> > I also attempted to tune on AM using a keyer, but hindsight, I don't
> > believe I had the correct adapter for the key to match this Drake;
> perhaps
> > that shorted something?
> >
> > Prior to this night, it was receiving and transmitting fine; with the
> > exception of a bad so-239 input was gave intermittent and scratchy
> receive
> > at times. It would also have low transmit after some transmissions, which
> > is why I replaced the c5 in the ac-4. Other than that, it was tuning up
> and
> > receiving.
> >

> > Now, I cannot get receive or power out.
> >
> >
> > The finals all have a glow to them.
> >
> > Any suggestions on the next step?
> >
> > thank you
> > JD-W0AJC
> >
>
>
>

[Non-text portions of this message have been removed]

11413. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 19:50:41 UTC
From: Garey Barrell
Topic: 10991 Message: 11413

JD -

I think we better check the +10V bus since you had 0A2 troubles.

Socket V20. There is a power resistor hanging on the side of the socket turret of V20. The terminal
at the 'top' with the resistor lead and the Wht/Red wireshould read about 11 VDC.

73, Garey - K4OAH
Glen Allen, VA

JD Reich wrote:
> Thank you Garey,
>
> I did confirm that the switch was switched to TCVR; it was and I switched
> it back and forth; this was working prior to these problems.
>
> I did get a 0.1A plate current, but when I increased XMTR gain, the current
> remained at 0.1a on 80, 20.
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> I also cleaned the relay contact points with DeOxit, and they were a bit
> dirty, but this did not help this particular problem.
>
> As far as the oscillators go, to determine if they are running or
> misaligned, what would the next step be?
>
> thank you again and 73
> JD - W0AJC
>
> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell <k4oah@...>wrote:
>
>> **
>>
>>
>> JD -
>>
>> OK. Let's try again.
>>
>> Confirm that slide switch on left side near rear is in 'TCVR' position.
>>
>> Always tune the transmitter in X-CW position, with filter switch set to
>> 'X'. A key is not necessary
>> and should NOT be plugged in.
>>
>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of
>> PLATE current. If so, then

>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an increase
>> in current, then quickly
>> dipthe PLATE control for minimum current.
>>
>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
>> circuit is not complete and
>> will need further troubleshooting.
>>
>> If PLATE current does NOT increase when XMTR GAIN is increased, then one
>> or more oscillators are not
>> running, or alignment is seriously maladjusted.
>>
>> DeoxIT or alcoholif that's all that you have applied to a strip of heavy
>> paper, file card or
>> business card drawn through relay contacts may help. The contact on top,
>> just to left of center, is
>> the Receive contact. Insert paper and slowly withdraw. Card will probably
>> show black stripe.
>> Continue until stripe no longer appears.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> JD Reich wrote:
>>> Good Morning Glen,
>>>
>>> Sorry for the delayed response; have just gotten around to testing. Thank
>>> you for your help thus far; this is my first time working on this Drake,
>> so
>>> please bear with my ignorance, i.e, capacitor C79. :)
>>>
>>> I tested the ac-4 and am getting proper voltage to all pins
>>>
>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>>>
>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
>>>
>>> Some history; I put a new coax input on, however the inner metal sleeve
>> was
>>> too long, shorting out with a wire just inside the rig, behind the coax
>>> input, I believe putting the rig into transmit; by the time I realized
>>> this, it was 30-40 seconds so unsure if this might have caused a
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>>> at times. It would also have low transmit after some transmissions, which
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>>> Now, I cannot get receive or power out.
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>>> The finals all have a glow to them.
>>>
>>> Any suggestions on the next step?
>>>
>>> thank you
>>> JD-W0AJC
>>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11414. Re: Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 19:52:06 UTC
From: jim seeber
Topic: 11399 Message: 11414

I am presently using an eico 722 with 2nt, works great. i prefer
the xtals as using the vfo i have to throw its switch from xmt
to rcv when going from r4a/2b to 2nt. recently paid bit over $150
for it, but that is pretty much the going price.
also use the vfo with my ht-40,
jim

11415. Re: [DrakeRadio] Re: Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 21:58:18 UTC
From: john
Topic: 11399 Message: 11415

I use the Halli (HA5?) VFO with my 2NT/2C/2CQ station and it's flawless ...
nice "transceive" operation

John K5MO

At 02:52 PM 1/17/2013, jim seeber wrote:
>I am presently using an eico 722 with 2nt, works great. i prefer
>the xtals as using the vfo i have to throw its switch from xmt
>to rcv when going from r4a/2b to 2nt. recently paid bit over $150
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> also use the vfo with my ht-40,
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>
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>Yahoo! Groups Links
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11416. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 22:23:38 UTC
From: Don Cunningham
Topic: 11404 Message: 11416

Garey,

You are bringing back memories with the early packet stuff. A friend and I got the GLB packet controller (maybe a kit?? I don't remember) from Hamtronics back East, and used them with our old Motorola Compa Stations so I guess we were the first packet fools down here in Southern Oklahoma. Was that the PK-1 maybe??? Anyway, we had built the GLB synthesizers for our rock bound Motorola's, then found these "new fangled" packet machines. We had been on RTTY on 146.70 for years by then. Lots of fun, but as you said, when it got crowded, we moved on to sending Wefax across the state, hi.

Good old days.

Don, WB5HAK

[Non-text portions of this message have been removed]

11417. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-17 23:32:37 UTC
From: JD Reich
Topic: 10991 Message: 11417

Hi Garey,

I tested and got a reading of 105v from the top of the resistor where it connects to the terminal. This was using the positive lead of the multimeter to the terminal/top of resistor to the other side of the resistor where the white and red wire was soldered having my multimeter set to 200, measuring volts dc. The white red wire did look a bit brown/scorched where it was soldered to the resistor.

I hope I'm doing this right, and again, thanks for your guidance and patience.

JD

Sent from my iPhone

On Jan 17, 2013, at 1:50 PM, Garey Barrell <k4oah@...> wrote:

> JD -
>
> I think we better check the +10V bus since you had 0A2 troubles.
>
> Socket V20. There is a power resistor hanging on the side of the socket turret of V20. The terminal
> at the 'top' with the resistor lead and the Wht/Red wireshould read about 11 VDC.
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> 73, Garey - K4OAH
> Glen Allen, VA
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> JD Reich wrote:
> > Thank you Garey,
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> > I did confirm that the switch was switched to TCVR; it was and I switched
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> > I did get a 0.1A plate current, but when I increased XMTR gain, the current
> > remained at 0.1a on 80, 20.
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> > dirty, but this did not help this particular problem.
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> > As far as the oscillators go, to determine if they are running or
> > misaligned, what would the next step be?
> >
> > thank you again and 73
> > JD - W0AJC
> >
> > On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@mindspring.com>wrote:

> >
> >> **
> >>
> >>
> >> JD -
> >>
> >> OK. Let's try again.
> >>
> >> Confirm that slide switch on left side near rear is in 'TCVR' position.
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> >> 'X'. A key is not necessary
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> >> Continue until stripe no longer appears.
> >>
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> >> 73, Garey - K4OAH
> >> Glen Allen, VA
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> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> JD Reich wrote:
> >>> Good Morning Glen,
> >>>
> >>> Sorry for the delayed response; have just gotten around to testing. Thank
> >>> you for your help thus far; this is my first time working on this Drake,
> >> so

> >>> please bear with my ignorance, i.e, capacitor C79. :)
> >>>
> >>> I tested the ac-4 and am getting proper voltage to all pins
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> >>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
> >>>
> >>> The tubes, v1, v5 and v13 are warm and have a slight glow.
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> >>> Some history; I put a new coax input on, however the inner metal sleeve
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> >>> Any suggestions on the next step?
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> >>> thank you
> >>> JD-W0AJC
> >>>
> >>
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> > > [Non-text portions of this message have been removed]
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> > >
> > > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11418. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 00:55:14 UTC
From: Ethan Blanton
Topic: 11404 Message: 11418

Garey Barrell spake unto us the following wisdom:
> I'm a contrarian in that I get my kicks out of putting the pieces
> together and making it all work.

That's not contrarian, that's Ham. ;-) There's a reason the handbook
is full of theory and projects!

Ethan

11419. Krusty is Ready for Prime Time and is For Sale!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 01:14:22 UTC
From: Steve Wedge
Topic: 11419 Message: 11419

If I was getting paid by the hour, I'd make more flipping burgers, but I wouldn't enjoy flipping burgers as much as rescuing a Drake radio from oblivion!

"Krusty", the T-4XB with a "chassis complexion problem", went back together late this afternoon and I fired him up in tandem with my "regular" R-4B. There was no smoke, no theatrics and everything was working great on 20m.

I checked all the RF stages and peaked them using the "detune" method on the INJ stages and regular peaking on the drivers.
Neutralisation was spot-on.

Checked the filter match and it was pretty much where it should have been. C2 was a bit of a tougher nut to crack, but once I remembered to centre the PBT to get equal signal strength readings when closing the PTT in SSB and adjusting for equal levels I got that knocked, too. It's DEFINITELY easier to use the unmuted receiver to adjust the carrier balance, filter match and frequency alignment!

Wattmeter indicates well over 150W on 80, falling to 100W on 10 with over 400 ma plate current. I did try it but don't like to push these on 10 anyway.

The front panel and knobs are in great shape. It has the original blue filters that are still blue! This is another reason I think this had low hours.

I bought this with no top cover, so the one I've put on ain't the prettiest one on the block but is certainly useable with no extra holes or excessive damage.

It's all aligned and cleaned! The corrosion on the chassis was removed after cleaning with a Dremel and wire brush, then I coated it with poly only where there were issues. Like I said, it looks ugly on the inside but really nice on the outside and works perfectly!

Email me off-list if you're interested. I'll get pics ready over the weekend. Shipping weight for these is right around 14 lbs and I'm in 27302.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

11420. Re: [DrakeRadio] Krusty is Ready for Prime Time and is For Sale!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 01:38:44 UTC
From: Robert Logan
Topic: 11419 Message: 11420

Steve, sounds like a great job. I'm interested for sure. Thanks,Bob, NZ5A

Sent from my iPhone

On Jan 17, 2013, at 7:14 PM, "Steve Wedge" <w1es1982@...> wrote:

If I was getting paid by the hour, I'd make more flipping burgers, but I wouldn't enjoy flipping burgers as much as rescuing a Drake radio from oblivion!

"Krusty", the T-4XB with a "chassis complexion problem", went back together late this afternoon and I fired him up in tandem with my "regular" R-4B. There was no smoke, no theatrics and everything was working great on 20m.

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11421. Re: [DrakeRadio] Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 02:29:29 UTC
From: Charles Ring
Topic: 11404 Message: 11421

On 1/16/2013 2353, bobnohren wrote:
>
> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>
> __. <!-- #ygrp-mkp { border: 1px solid #d8d8d8; font-family: Arial;
> margin: 10px 0; padding: 0 10px; } #ygrp-mkp hr { border: 1px solid
> #d8d8d8; } #ygrp-mkp #hd { color: #628c2a; font-size: 85%;
> font-weight: 700; line-height: 122%; margin: 10px 0; } #ygrp-mkp #ads
> { margin-bottom: 10px; } #ygrp-mkp .ad { padding: 0 0; } #ygrp-mkp .ad
> p { margin: 0; } #ygrp-mkp .ad a { color: #0000ff; text-decoration:
> none; } #ygrp-sponsor #ygrp-lc { font-family: Arial; } #ygrp-sponsor
> #ygrp-lc #hd { margin: 10px 0px; font-weight: 700; font-size: 78%;
> line-height: 122%; } #ygrp-sponsor #ygrp-lc .ad { margin-bottom: 10px;
> padding: 0 0; } #actions { font-family: Verdana; font-size: 11px;
> padding: 10px 0; } #activity { background-color: #e0ecee; float: left;
> font-family: Verdana; font-size: 10px; padding: 10px; } #activity span
> { font-weight: 700; } #activity span:first-child { text-transform:
> uppercase; } #activity span a { color: #5085b6; text-decoration: none;
> } #activity span span { color: #ff7900; } #activity span .underline {
> text-decoration: underline; } .attach { clear: both; display: table;
> font-family: Arial; font-size: 12px; padding: 10px 0; width: 400px; }
> .attach div a { text-decoration: none; } .attach img { border: none;
> padding-right: 5px; } .attach label { display: block; margin-bottom:
> 5px; } .attach label a { text-decoration: none; } blockquote { margin:
> 0 0 0 4px; } .bold { font-family: Arial; font-size: 13px; font-weight:
> 700; } .bold a { text-decoration: none; } dd.last p a { font-family:
> Verdana; font-weight: 700; } dd.last p span { margin-right: 10px;
> font-family: Verdana; font-weight: 700; } dd.last p span.yshortcuts {
> margin-right: 0; } div.attach-table div div a { text-decoration: none;
> } div.attach-table { width: 400px; } div.file-title a, div.file-title
> a:active, div.file-title a:hover, div.file-title a:visited {
> text-decoration: none; } div.photo-title a, div.photo-title a:active,
> div.photo-title a:hover, div.photo-title a:visited { text-decoration:
> none; } div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts { font-family:
> Verdana; font-size: 10px; font-weight: normal; } .green { color:
> #628c2a; } .MsoNormal { margin: 0 0 0 0; } o { font-size: 0; } #photos
> div { float: left; width: 72px; } #photos div div { border: 1px solid
> #666666; height: 62px; overflow: hidden; width: 62px; } #photos div
> label { color: #666666; font-size: 10px; overflow: hidden; text-align:
> center; white-space: nowrap; width: 64px; } #reco-category {
> font-size: 77%; } #reco-desc { font-size: 77%; } .replbq { margin:
> 4px; } #ygrp-actbar div a:first-child { /* border-right: 0px solid
> #000;*/ margin-right: 2px; padding-right: 5px; } #ygrp-mlmsg {
> font-size: 13px; font-family: Arial, helvetica,clean, sans-serif;
> *font-size: small; *font: x-small; } #ygrp-mlmsg table { font-size:

> inherit; font: 100%; } #ygrp-mlmsg select, input, textarea { font: 99%
> Arial, Helvetica, clean, sans-serif; } #ygrp-mlmsg pre, code {
> font:115% monospace; *font-size:100%; } #ygrp-mlmsg * { line-height:
> 1.22em; } #ygrp-mlmsg #logo { padding-bottom: 10px; } #ygrp-msg p a {
> font-family: Verdana; } #ygrp-msg p#attach-count span { color:
> #1E66AE; font-weight: 700; } #ygrp-reco #reco-head { color: #ff7900;
> font-weight: 700; } #ygrp-reco { margin-bottom: 20px; padding: 0px; }
> #ygrp-sponsor #ov li a { font-size: 130%; text-decoration: none; }
> #ygrp-sponsor #ov li { font-size: 77%; list-style-type: square;
> padding: 6px 0; } #ygrp-sponsor #ov ul { margin: 0; padding: 0 0 0
> 8px; } #ygrp-text { font-family: Georgia; } #ygrp-text p { margin: 0 0
> 1em 0; } #ygrp-text tt { font-size: 120%; } #ygrp-vital ul
> li:last-child { border-right: none !important; } -->
>

Panadaptors are an older technology than anything from Drake.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

11422. Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 02:44:51 UTC
From: w9ac
Topic: 11404 Message: 11422

Because the R4 series preselector is relatively narrow, and more noticeable on the lower bands, the baseline won't be flat like the screens most of us have seen when using a panadapter. If this effect won't be an annoyance, it's worth considering if using a high quality buffer amp like the type Floyd described.

Paul, W9AC

--- In DrakeRadio@yahoogroups.com, "floydsense" wrote:
>
>
>
> --- In DrakeRadio@yahoogroups.com, "bobnohren" wrote:
> >
> > Is there a way to get this new technology into a Drake R-4B/T-4XB?
> >
> Conceptually, yes. Here's how I'd approach the problem - there are other ways, including use of a Softrock receiver, but this is what I prefer:
>
> 1. Obtain the first IF signal (believe that's 5.645 MHz) via a tap before any filters and use a Clifton Laboratories buffer amplifier kit mounted inside the R4B near the tap.
>
> 2. Contact N8LP and ask Larry if he can provide the parts or values for his LP-Pan unit to be able to handle the 5.645 MHz input (I assume this is possible)
>
> 3. Obtain one of the recommended sound cards that work well with LP-Pan - that will allow you to see up to 192 KHz of the band in one sweep - that's a lot.
>
> 4. Obtain the free NaP3 panadaptor software that works with LP-Pan. That will provide all the panadaptor function including waterfall, etc.
>
> Since there's no way to obtain frequency information from the Drake, you'll end up with NaP3 showing you the entire IF bandwidth and you'll have to play with NaP3 to determine exactly where the center is. After that, you can configure NaP3 to show the frequency as plus and minus offsets from that center. You'll be able to zoom in from the 192 KHz width to as little as 1 KHz.
>
> You'll be tempted to use other software approaches and they're all inferior to NaP3 for the panadaptor function.
>
> If the LP-Pan can't be adapted to the R4B IF frequency, another equally good approach (but more expensive) is to use an SDR-IQ receiver from RF-Space along with its companion software. The SDR-IQ will handle the Drake IF frequency just fine. I can't recall whether or not you can configure the software to show you plus and minus offsets from the center. You could get the software ahead of time and check that out.
>

> Another approach (cheaper) is to use one of the Softrock receivers. If you don't mind spending the time to get and keep all the associated pieces running properly, this might work for you. If you want a solution that works better and doesn't require ongoing effort, use one of the other approaches.
>
> 73, Floyd - K8AC
>

11423. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 03:20:58 UTC
From: Garey Barrell
Topic: 10991 Message: 11423

JD -

Check the voltage at the 'other end' of that resistor just to be sure. You should get about 11 VDC
on one end and 150V on the other end. The 11 VDC end is the supply for Q4 and the PTO. IF you
measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you have the Service CD yet?? Q4
is on Board 1. If it has more than 11 VDC on it, it's blown

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

JD Reich wrote:
> Hi Garey,
>
> I tested and got a reading of 105v from the top of the resistor where it connects to the terminal. This was using the positive lead of the multimeter to the terminal/top of resistor to the other side of the resistor where the white and red wire was soldered having my multimeter set to 200, measuring volts dc. The white red wire did look a bit brown/scorched where it was soldered to the resistor.
>
> I hope I'm doing this right, and again, thanks for your guidance and patience.
>
> JD
>
>
>
> Sent from my iPhone
>
> On Jan 17, 2013, at 1:50 PM, Garey Barrell <k4oah@...> wrote:
>
>> JD -
>>
>> I think we better check the +10V bus since you had 0A2 troubles.
>>
>> Socket V20. There is a power resistor hanging on the side of the socket turret of V20. The terminal
>> at the 'top' with the resistor lead and the Wht/Red wireshould read about 11 VDC.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA

>>
>> JD Reich wrote:
>>> Thank you Garey,
>>>
>>> I did confirm that the switch was switched to TCVR; it was and I switched
>>> it back and forth; this was working prior to these problems.
>>>
>>> I did get a 0.1A plate current, but when I increased XMTR gain, the current
>>> remained at 0.1a on 80, 20.
>>>
>>> I also cleaned the relay contact points with DeOxit, and they were a bit
>>> dirty, but this did not help this particular problem.
>>>
>>> As far as the oscillators go, to determine if they are running or
>>> misaligned, what would the next step be?
>>>
>>> thank you again and 73
>>> JD - W0AJC
>>>
>>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@...>wrote:
>>>
>>>> **
>>>>
>>>>
>>>> JD -
>>>>
>>>> OK. Let's try again.
>>>>
>>>> Confirm that slide switch on left side near rear is in 'TCVR' position.
>>>>
>>>> Always tune the transmitter in X-CW position, with filter switch set to
>>>> 'X'. A key is not necessary
>>>> and should NOT be plugged in.
>>>>
>>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of
>>>> PLATE current. If so, then
>>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an increase
>>>> in current, then quickly
>>>> dipthe PLATE control for minimum current.
>>>>
>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
>>>> circuit is not complete and
>>>> will need further troubleshooting.
>>>>
>>>> If PLATE current does NOT increase when XMTR GAIN is increased, then one
>>>> or more oscillators are not
>>>> running, or alignment is seriously maladjusted.
>>>>
>>>> DeoxIT or alcoholif that's all that you have applied to a strip of heavy
>>>> paper, file card or

>>>> business card drawn through relay contacts may help. The contact on top,
>>>> just to left of center, is
>>>> the Receive contact. Insert paper and slowly withdraw. Card will probably
>>>> show black stripe.
>>>> Continue until stripe no longer appears.
>>>>
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>>
>>>>
>>>> JD Reich wrote:
>>>>> Good Morning Glen,
>>>>>
>>>>> Sorry for the delayed response; have just gotten around to testing. Thank
>>>>> you for your help thus far; this is my first time working on this Drake,
>>>> so
>>>>> please bear with my ignorance, i.e, capacitor C79. :)
>>>>>
>>>>> I tested the ac-4 and am getting proper voltage to all pins
>>>>>
>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>>>>>
>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
>>>>>
>>>>> Some history; I put a new coax input on, however the inner metal sleeve
>>>> was
>>>>> too long, shorting out with a wire just inside the rig, behind the coax
>>>>> input, I believe putting the rig into transmit; by the time I realized
>>>>> this, it was 30-40 seconds so unsure if this might have caused a
>>>> problem. I
>>>>> was getting receive after this however.
>>>>>
>>>>> I also attempted to tune on AM using a keyer, but hindsight, I don't
>>>>> believe I had the correct adapter for the key to match this Drake;
>>>> perhaps
>>>>> that shorted something?
>>>>>
>>>>> Prior to this night, it was receiving and transmitting fine; with the
>>>>> exception of a bad so-239 input was gave intermittent and scratchy
>>>> receive
>>>>> at times. It would also have low transmit after some transmissions, which
>>>>> is why I replaced the c5 in the ac-4. Other than that, it was tuning up
>>>> and
>>>>> receiving.
>>>>>
>>>>> Now, I cannot get receive or power out.

>>>>>
>>>>>
>>>>> The finals all have a glow to them.
>>>>>
>>>>> Any suggestions on the next step?
>>>>>
>>>>> thank you
>>>>> JD-W0AJC
>>>>>
>>>>
>>> [Non-text portions of this message have been removed]
>>>
>>>
>>>
>>> ------------------------------------
>>>
>>> Yahoo! Groups Links
>>>
>>>
>>>
>>>
>>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
>
>

11424. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 03:27:42 UTC
From: Garey Barrell
Topic: 11404 Message: 11424

Paul -

Good point! Probably a good bit less than 96 kHz anyway, negating the biggest advantage of the
sound cardupgrade. The 'zero peak' can easily be shifted off to one side or the other.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w9ac wrote:
> Because the R4 series preselector is relatively narrow, and more noticeable on the lower bands, the baseline won't be flat like the screens most of us have seen when using a panadapter. If this effect won't be an annoyance, it's worth considering if using a high quality buffer amp like the type Floyd described.
>
> Paul, W9AC
>
> --- In DrakeRadio@yahoogroups.com, "floydsense" wrote:
>>
>>
>> --- In DrakeRadio@yahoogroups.com, "bobnohren" wrote:
>>> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>>>
>> Conceptually, yes. Here's how I'd approach the problem - there are other ways, including use of a Softrock receiver, but this is what I prefer:
>>
>> 1. Obtain the first IF signal (believe that's 5.645 MHz) via a tap before any filters and use a Clifton Laboratories buffer amplifier kit mounted inside the R4B near the tap.
>>
>> 2. Contact N8LP and ask Larry if he can provide the parts or values for his LP-Pan unit to be able to handle the 5.645 MHz input (I assume this is possible)
>>
>> 3. Obtain one of the recommended sound cards that work well with LP-Pan - that will allow you to see up to 192 KHz of the band in one sweep - that's a lot.
>>
>> 4. Obtain the free NaP3 panadaptor software that works with LP-Pan. That will provide all the panadaptor function including waterfall, etc.
>>
>> Since there's no way to obtain frequency information from the Drake, you'll end up with NaP3 showing you the entire IF bandwidth and you'll have to play with NaP3 to determine exactly where the center is. After that, you can configure NaP3 to show the frequency as plus and minus offsets from that center. You'll be able to zoom in from the 192 KHz width

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>> You'll be tempted to use other software approaches and they're all inferior to NaP3 for the panadaptor function.
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>> If the LP-Pan can't be adapted to the R4B IF frequency, another equally good approach (but more expensive) is to use an SDR-IQ receiver from RF-Space along with its companion software. The SDR-IQ will handle the Drake IF frequency just fine. I can't recall whether or not you can configure the software to show you plus and minus offsets from the center. You could get the software ahead of time and check that out.
>>
>> Another approach (cheaper) is to use one of the Softrock receivers. If you don't mind spending the time to get and keep all the associated pieces running properly, this might work for you. If you want a solution that works better and doesn't require ongoing effort, use one of the other approaches.
>>
>> 73, Floyd - K8AC
>>

11425. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 03:39:16 UTC
From: Paul Christensen
Topic: 11404 Message: 11425

On 160m, just shift an R4's VFO +/- 20 kHz and observe the radical change in Rx sensitivity if the preselector isn't re-peaked. I've not used a TR-7 or R7 in over a decade but since preselection is fixed, I suspect the passband is mostly flat across each band as it is with most non Drake transceivers.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Thursday, January 17, 2013 10:27 PM
Subject: Re: [DrakeRadio] Re: Panadapter for Drake b-line

Paul -

Good point! Probably a good bit less than 96 kHz anyway, negating the biggest advantage of the
sound cardupgrade. The 'zero peak' can easily be shifted off to one side or the other.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

w9ac wrote:
> Because the R4 series preselector is relatively narrow, and more noticeable on the lower bands, the baseline won't be flat like the screens most of us have seen when using a panadapter. If this effect won't be an annoyance, it's worth considering if using a high quality buffer amp like the type Floyd described.
>
> Paul, W9AC
>
> --- In DrakeRadio@yahoogroups.com, "floydsense" wrote:
>>
>>
>> --- In DrakeRadio@yahoogroups.com, "bobnohren" wrote:
>>> Is there a way to get this new technology into a Drake R-4B/T-4XB?
>>>
>> Conceptually, yes. Here's how I'd approach the problem - there are other ways, including use of a Softrock receiver, but this is what I prefer:
>>
>> 1. Obtain the first IF signal (believe that's 5.645 MHz) via a tap before any filters and use a Clifton Laboratories buffer amplifier kit mounted inside the R4B near the tap.
>>
>> 2. Contact N8LP and ask Larry if he can provide the parts or values for his LP-Pan unit to be able to handle the 5.645 MHz input (I assume this is possible)

>>
>> 3. Obtain one of the recommended sound cards that work well with LP-Pan - that will allow you to see up to 192 KHz of the band in one sweep - that's a lot.
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>> 4. Obtain the free NaP3 panadaptor software that works with LP-Pan. That will provide all the panadaptor function including waterfall, etc.
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>>
>> You'll be tempted to use other software approaches and they're all inferior to NaP3 for the panadaptor function.
>>
>> If the LP-Pan can't be adapted to the R4B IF frequency, another equally good approach (but more expensive) is to use an SDR-IQ receiver from RF-Space along with its companion software. The SDR-IQ will handle the Drake IF frequency just fine. I can't recall whether or not you can configure the software to show you plus and minus offsets from the center. You could get the software ahead of time and check that out.
>>
>> Another approach (cheaper) is to use one of the Softrock receivers. If you don't mind spending the time to get and keep all the associated pieces running properly, this might work for you. If you want a solution that works better and doesn't require ongoing effort, use one of the other approaches.
>>
>> 73, Floyd - K8AC
>>

[Non-text portions of this message have been removed]

11426. Re: [DrakeRadio] Re: Drake 2NT with VFO Usage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 04:20:03 UTC
From: whitebear1122@...
Topic: 11399 Message: 11426

Jim, While I no longer have my 2NT and Eico 722, I only needed to switch the transmitter switch on the 2NT to mute the 2C receiver and enable the VFO. I never had to switch the transmitter switch AND switch the vfo. Maybe the 2NT/R4A receiver is different. I sure enjoyed owning that 2NT and 722 with the 2C. Great station. I sold it 2 years ago at the start of my major radio sell off. I have already sold about 75% to 80% of my stuff. 73, Scott WA9WFA

----- Original Message -----
From: "jim seeber" <wb3gnj@...>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, January 17, 2013 1:52:06 PM
Subject: [DrakeRadio] Re: Drake 2NT with VFO Usage

I am presently using an eico 722 with 2nt, works great. i prefer
the xtals as using the vfo i have to throw its switch from xmt
to rcv when going from r4a/2b to 2nt. recently paid bit over $150
for it, but that is pretty much the going price.
also use the vfo with my ht-40,
jim

[Non-text portions of this message have been removed]

11427. Crystals go where

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 05:43:29 UTC
From: Tom
Topic: 11427 Message: 11427

I should read both manuals again, but if anyone knows:

I have extra crystals for my T-x4 and R-4, at 12.6, 39.1, 40.1 and 40.6 to cover the rest of 10 and 160.

If I'm tuning with the T-4x, just to receive at this point, do the crystals go in it, or in the R-4?

Feel free to smack me if that's a dumb question.

Thanks.

11428. Re: [DrakeRadio] Crystals go where

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 06:01:08 UTC
From: amfone
Topic: 11427 Message: 11428

I believe some go in the radio the main ones others have a space on the back usually covered which you remove to put the crystals in.

From: Tom <ptgumc@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, January 18, 2013 12:43 AM
Subject: [DrakeRadio] Crystals go where

I should read both manuals again, but if anyone knows:

I have extra crystals for my T-x4 and R-4, at 12.6, 39.1, 40.1 and 40.6 to cover the rest of 10 and 160.

If I'm tuning with the T-4x, just to receive at this point, do the crystals go in it, or in the R-4?

Feel free to smack me if that's a dumb question.

Thanks.

[Non-text portions of this message have been removed]

11429. Re: [DrakeRadio] Crystals go where

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 12:24:40 UTC
From: Donley
Topic: 11427 Message: 11429

Tom,

If you are using the transmitter as the controlling VFO, the crystals should be placed in the transmitter. If the reciver is the controlling VFO, the crystals should be placed in the receiver.

Richard
KC9UB

----- Original Message -----
From: Tom
To: DrakeRadio@yahoogroups.com
Sent: Friday, January 18, 2013 12:43 AM
Subject: [DrakeRadio] Crystals go where

I should read both manuals again, but if anyone knows:

I have extra crystals for my T-x4 and R-4, at 12.6, 39.1, 40.1 and 40.6 to cover the rest of 10 and 160.

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Feel free to smack me if that's a dumb question.

Thanks.

[Non-text portions of this message have been removed]

11430. Re: [DrakeRadio] Crystals go where

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 12:29:41 UTC
From: Steve Wedge
Topic: 11427 Message: 11430

Tom,

Typically most people put them in the receiver. If these are indeed "extra" and/or you want to use the tx PTO put them in the area provided on top of the tx chassis. You'll have to remove the top cover to get in there. You can then use the crystals control in the lower right of the front panel.

HTH,

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jan 18, 2013, at 7:24 AM, "Donley" <donley.dn@comcast.net> wrote:

> Tom,
>
> If you are using the transmitter as the controlling VFO, the crystals should be placed in the transmitter. If the reciver is the controlling VFO, the crystals should be placed in the receiver.
>
> Richard
> KC9UB
>
> ----- Original Message -----
> From: Tom
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, January 18, 2013 12:43 AM
> Subject: [DrakeRadio] Crystals go where
>
> I should read both manuals again, but if anyone knows:
>
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>
> Feel free to smack me if that's a dumb question.
>
> Thanks.
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11431. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 12:36:50 UTC
From: Steve Wedge
Topic: 11404 Message: 11431

It could be cool to build a modern circuit and house it in a castaway Drake chassis. Imagine building a flat-responding front end and putting the guts of something like an Elecraft P3 in it!

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jan 17, 2013, at 10:39 PM, "Paul Christensen" <w9ac@...> wrote:

> On 160m, just shift an R4's VFO +/- 20 kHz and observe the radical change in Rx sensitivity if the preselector isn't re-peaked. I've not used a TR-7 or R7 in over a decade but since preselection is fixed, I suspect the passband is mostly flat across each band as it is with most non Drake transceivers.
>
> Paul, W9AC
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, January 17, 2013 10:27 PM
> Subject: Re: [DrakeRadio] Re: Panadapter for Drake b-line
>
> Paul -
>
> Good point! Probably a good bit less than 96 kHz anyway, negating the biggest advantage of the
> sound cardupgrade. The 'zero peak' can easily be shifted off to one side or the other.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
> w9ac wrote:
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> >
> > Paul, W9AC
> >
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> >>
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> >> --- In DrakeRadio@yahoogroups.com, "bobnohren" wrote:

> >>> Is there a way to get this new technology into a Drake R-4B/T-4XB?
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> >> Conceptually, yes. Here's how I'd approach the problem - there are other ways, including use of a Softrock receiver, but this is what I prefer:
> >>
> >> 1. Obtain the first IF signal (believe that's 5.645 MHz) via a tap before any filters and use a Clifton Laboratories buffer amplifier kit mounted inside the R4B near the tap.
> >>
> >> 2. Contact N8LP and ask Larry if he can provide the parts or values for his LP-Pan unit to be able to handle the 5.645 MHz input (I assume this is possible)
> >>
> >> 3. Obtain one of the recommended sound cards that work well with LP-Pan - that will allow you to see up to 192 KHz of the band in one sweep - that's a lot.
> >>
> >> 4. Obtain the free NaP3 panadaptor software that works with LP-Pan. That will provide all the panadaptor function including waterfall, etc.
> >>
> >> Since there's no way to obtain frequency information from the Drake, you'll end up with NaP3 showing you the entire IF bandwidth and you'll have to play with NaP3 to determine exactly where the center is. After that, you can configure NaP3 to show the frequency as plus and minus offsets from that center. You'll be able to zoom in from the 192 KHz width to as little as 1 KHz.
> >>
> >> You'll be tempted to use other software approaches and they're all inferior to NaP3 for the panadaptor function.
> >>
> >> If the LP-Pan can't be adapted to the R4B IF frequency, another equally good approach (but more expensive) is to use an SDR-IQ receiver from RF-Space along with its companion software. The SDR-IQ will handle the Drake IF frequency just fine. I can't recall whether or not you can configure the software to show you plus and minus offsets from the center. You could get the software ahead of time and check that out.
> >>
> >> Another approach (cheaper) is to use one of the Softrock receivers. If you don't mind spending the time to get and keep all the associated pieces running properly, this might work for you. If you want a solution that works better and doesn't require ongoing effort, use one of the other approaches.
> >>
> >> 73, Floyd - K8AC
> >>
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11432. Stopped transmitting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 12:56:45 UTC
From: bobnohren
Topic: 11432 Message: 11432

Got my newly serviced Drake B-line back a couple of months ago and it was working fine. One minute I was tuning up, transmitted a couple of times, and the next minute, no reading on the watt meter and no hum from the linear. Switched to 'tune' all was silent , as usual, but no power out. Receiver never missed a beat and was working as usual. All lights are on. When I turned 'tune' back to ssb, it hung up in the tune mode longer than usual, then finally clicked back to receive.
Now what?

Bob N4IBK

PS Someone made mention of a service CD. Where might I get one of those?

11433. Re: [DrakeRadio] Stopped transmitting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 15:35:44 UTC
From: Garey Barrell
Topic: 11432 Message: 11433

Bob -

When you key the transmitter with GAIN at minimum (full CCW) do you see0.070 A of PLATE current on
meter?

See service CDs at <www.k4oah.com>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

bobnohren wrote:
> Got my newly serviced Drake B-line back a couple of months ago and it was working fine. One minute I was tuning up, transmitted a couple of times, and the next minute, no reading on the watt meter and no hum from the linear. Switched to 'tune' all was silent , as usual, but no power out. Receiver never missed a beat and was working as usual. All lights are on.
> When I turned 'tune' back to ssb, it hung up in the tune mode longer than usual, then finally clicked back to receive.
> Now what?
>
> Bob N4IBK
>
> PS Someone made mention of a service CD. Where might I get one of those?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

11434. TR3 METER STILL NEEDED CAN BE S OR PLATE METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 17:49:53 UTC
From: ROBERT P
Topic: 11434 Message: 11434

Hi all thanks to everyone including Paul,Garey & Robert who have given advice and help with my search for a replacement meter for my TR3 as I understand it both the S and Plate current meter use the same 5ma FSD movement with 80 ohm coil resistance is this correct ? if so does anyone have either a meter I could buy ? or does anybody know a company or person who could rebuild my burnt out meter ? thanks again Bob G1EGL.

11435. Re: [DrakeRadio] Re: Panadapter for Drake b-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 18:09:56 UTC
From: Garey Barrell
Topic: 11404 Message: 11435

Don -

Yes, we went back to HF autostart RTTY on 14100 kHz. Nothing like a 28 running at 100 baud! :-)
We started with homebrew TNCs then went to the TNC-1 from TAPR very early in 1982?

Did you have a TR-3 donor? If so, the "G" looking for ameter. He says both PLATE and S meters are
5 mA fs. Dowe know that??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> You are bringing back memories with the early packet stuff. A friend and I got the GLB packet controller (maybe a kit?? I don't remember) from Hamtronics back East, and used them with our old Motorola Compa Stations so I guess we were the first packet fools down here in Southern Oklahoma. Was that the PK-1 maybe??? Anyway, we had built the GLB synthesizers for our rock bound Motorola's, then found these "new fangled" packet machines. We had been on RTTY on 146.70 for years by then. Lots of fun, but as you said, when it got crowded, we moved on to sending Wefax across the state, hi.
>
> Good old days.
>
> Don, WB5HAK
>
>

11436. TR3 Parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 18:19:44 UTC
From: Don Cunningham
Topic: 11436 Message: 11436

Garey,

I too did some autostart on 20M, but I was not a regular there. I was very heavily involved in Navy MARS then and dedicated autostart on 2M with a BUNCH of locals. We even put up a couple of RTTY repeaters on a mountain to connect two active groups. You must understand that mountains are NOT high in Oklahoma, but a change from the flat land, and helpful for repeater sites.

I have no TR3 parts at all. The TR3 is one of the only Drake rigs I have not owned at one time or another!!! Most of what is left here in parts is what I bought when they closed things out online at Drake. I only wish I had bought more when the opportunity was there.

73, and thanks for all you do,
Don, WB5HAK

[Non-text portions of this message have been removed]

11437. Re: [DrakeRadio] TR3 Parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 18:56:46 UTC
From: Garey Barrell
Topic: 11436 Message: 11437

Don -

OK. I don't 'know' that the meters are identical. I know the '3 PLATE meter is different than the
'4. Nuthin's ever easy.

Memory is going, we were actually on 14.075. You may have been aware of NAVMARCORMARS CATC program
and the DT-600. The CATC concept was to automatically route RTTY traffic by call signs (kind of a
simple packet system), which is why our MARS call suffix was the same as our FCC calls, i.e., N0OAH.
The DT-600 was my rework of the ST-6 Irv Hoff designed. We spent HOURS with me trying to convince
him of the advantages of single board construction (think TR-7 / DeoxIT!) over his plug-in card
system. He was just too enamored with the plug in card idea! So I developed the DT-600 just to show
him it could be done. (Stubborn, ain't I?) Bob Scalf, K4EID saw it and wanted it for CATC. Archie
was the digital guy, and Bob Clark was the writer for the article. Archie developed a 'sorta'
functional digital board, but I don't think ever had a reproducible system. There was some demand
for the DT-600 from an article published in Ham Radio magazine, so Bob Scalf's brother in Miami put
together some kits that he sold fora while.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> I too did some autostart on 20M, but I was not a regular there. I was very heavily involved in Navy MARS then and dedicated autostart on 2M with a BUNCH of locals. We even put up a couple of RTTY repeaters on a mountain to connect two active groups. You must understand that mountains are NOT high in Oklahoma, but a change from the flat land, and helpful for repeater sites.
>
> I have no TR3 parts at all. The TR3 is one of the only Drake rigs I have not owned at one time or another!!! Most of what is left here in parts is what I bought when they closed

things out online at Drake. I only wish I had bought more when the opportunity was there.
>
> 73, and thanks for all you do,
> Don, WB5HAK
>

11438. Re: [DrakeRadio] TR3 Parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 19:30:20 UTC
From: Don Cunningham
Topic: 11436 Message: 11438

Oh, yes, I remember the DT-600 very well. I probably built 10 or more of them for "building impaired" MARS members, hi. That unit (toroids properly tuned) is undoubtedly the best TU I have ever used. It is even better than my present ST-8000 HAL unit, IMHO. I have two of the DT-600 commercial board units that I need to check out, re-cap, and get back on RTTY. I didn't participate much in CATC, as I was busily paying for a business a ham friend and I got into. After deciding that wouldn't provide the living we both needed, I got my Master's degree and went back to education. All that work/schooling sure cut into my time for hamming.

I got back into active MARS during Desert Shield/Desert Storm with a packet BBS that turned into Pactor, etc (MDS system). I did some of the evaluation of HAL's Clover system on Navy MARS frequencies using boards Navy MARS provided from HAL to enhance our BBS setups. Clover was difficult for many to use, but I thought it was a neat concept for message handling. I took traffic from Hawaii and other WESTPAC on a 16 meg frequency and put it on 2M to a couple of other stations in Oklahoma to put on 5 and 7 megs for distribution. Neat system, but a full time after hours job for the three of us, hi. I was made an Associate Member for that work, and "retired" from active MARS work.

Okay, I digressed from Drake, but all this started first on Drake 4 line gear, then on my TR7, so there, I tied it in some.

I hope that Bob, G1EGL, finds his meter.

73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11439. RE: [DrakeRadio] Krusty is Ready for Prime Time and is For Sale!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-18 21:29:50 UTC
From: steve white
Topic: 11419 Message: 11439

I have a T4- R4A combo that is really crusty too but work ok. I didn't do much to clean the rust off the top since it has a lot of rust but got the big chunks off.. I will be looking forward to your pictures to compare them to mine. Maybe I should be taking more rust off, I didn't use any power tools to remove any rust since I didn't want dismantle both radios..I did take a little wire brush and some scotch brite to them. There were places that I could not get to very well. Doing more would have required substantial tear downs. Do you mean Poly urethane clear that I would normally use on wood to protect a finish or protect it from the elements??

Steve NU0P

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Thursday, January 17, 2013 07:14
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Krusty is Ready for Prime Time and is For Sale!

If I was getting paid by the hour, I'd make more flipping burgers, but I wouldn't enjoy flipping burgers as much as rescuing a Drake radio from oblivion!

"Krusty", the T-4XB with a "chassis complexion problem", went back together late this afternoon and I fired him up in tandem with my "regular" R-4B. There was no smoke, no theatrics and everything was working great on 20m.

I checked all the RF stages and peaked them using the "detune" method on the INJ stages and regular peaking on the drivers.
Neutralisation was spot-on.

Checked the filter match and it was pretty much where it should have been. C2 was a bit of a tougher nut to crack, but once I remembered to centre the PBT to get equal signal strength readings when closing the PTT in SSB and adjusting for equal levels I got that knocked, too. It's DEFINITELY easier to use the unmuted receiver to adjust the carrier balance, filter match and frequency alignment!

Wattmeter indicates well over 150W on 80, falling to 100W on 10 with over 400 ma plate current. I did try it but don't like to push these on 10 anyway.

The front panel and knobs are in great shape. It has the original blue filters that are still blue! This is another reason I think this had low hours.

I bought this with no top cover, so the one I've put on ain't the prettiest one on the block but is certainly useable with no extra holes or excessive damage.

It's all aligned and cleaned! The corrosion on the chassis was removed after cleaning with a Dremel and wire brush, then I coated it with poly only where there were issues. Like I said, it looks ugly on the inside but really nice on the outside and works perfectly!

Email me off-list if you're interested. I'll get pics ready over the weekend. Shipping weight for these is right around 14 lbs and I'm in 27302.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11440. Re: Crystals go where

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 03:35:08 UTC
From: Tom
Topic: 11427 Message: 11440

I've had them where Richard and Steve said. Thanks for input.

--- In DrakeRadio@yahoogroups.com, Steve Wedge wrote:
>
> Tom,
>
> Typically most people put them in the receiver. If these are indeed "extra" and/or you want to use the tx PTO put them in the area provided on top of the tx chassis. You'll have to remove the top cover to get in there. You can then use the crystals control in the lower right of the front panel.
>
> HTH,
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On Jan 18, 2013, at 7:24 AM, "Donley" wrote:
>
> > Tom,
> >
> > If you are using the transmitter as the controlling VFO, the crystals should be placed in the transmitter. If the reciver is the controlling VFO, the crystals should be placed in the receiver.
> >
> > Richard
> > KC9UB
> >
> > ----- Original Message -----
> > From: Tom
> > To: DrakeRadio@yahoogroups.com
> > Sent: Friday, January 18, 2013 12:43 AM
> > Subject: [DrakeRadio] Crystals go where
> >
> > I should read both manuals again, but if anyone knows:
> >
> > I have extra crystals for my T-x4 and R-4, at 12.6, 39.1, 40.1 and 40.6 to cover the rest of 10 and 160.
> >
> > If I'm tuning with the T-4x, just to receive at this point, do the crystals go in it, or in the R-4?
> >
> > Feel free to smack me if that's a dumb question.
> >
> > Thanks.
> >

> > [Non-text portions of this message have been removed]
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

11441. Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 03:38:14 UTC
From: Jim Shorney
Topic: 11392 Message: 11441

I had to draw this out on paper to get it right in my head. I think I did have the offset backwards. Here's the way it works as I think I see it, assuming PBT is off:

The center of the IF filter is 5645.0 KHz. In USB mode, the carrier is placed at 5643.6, allowing the upper sideband to pass through the IF filter. In CW mode, the "carrier" is at 5644.2, still in the USB area. This is your BFO, and this is why you listen to CW in USB mode. The CW transmit oscillator is nominally at 5645.8 according to info found in the block diagram in the service manual. This must be a misprint, because the math doesn't work out; that would give a 1.6 KHz transmit offset. The crystal is listed as 5645.0 in the BOM, which makes sense for an 800 Hz sidetone (5645.0 - 5644.2 = .8 KHz). If you tune down from zero beat of an incoming signal and go for an 800 Hz CW note, your transmitter will be on his transmit frequency. I think I've got that right now.

Perfect. Even Garey should love it. :D

Now, in order for this to work, you need to use the main dial, with RIT off. Once you have that 800 Hz offset dialed in, any subsequent tuning to avoid interference, change the tone, etc., should be done with the RIT or your other VFO (if so equipped). Don't touch that dial!. (I've been waiting to say that...).

The offset could be changed by adjusting the CW oscillator or the CW fixed passband pot. It would be a good idea to check the keying waveform if the CW oscillator is changed (or even if not). Floyd's great article on this subject is spot-on (so to speak):

http://www.wb4hfn.com/DRAKE/DrakeArticles/TR7_Key_Clicks.pdf

73

-Jim
NU0C

On Wed, 16 Jan 2013 10:54:40 -0500, Floyd Sense wrote:

>On 1/16/2013 10:05 AM, Garey Barrell wrote:
>> I don't know which way the TR-7 offsets, but I suspect it will be LSB.
>
>For the TR7, it's USB. For most modern transceivers, two CW "modes" are
>used - UCW and LCW (!). In any case, the transceiver adjusts the
>offsets and BFOs accordingly and no matter which CW mode you use, you'll
>be on the right frequency. I agree on the problem with two operators
>using different offsets and the resulting slight differences in frequency.
>

>That was always one of the strengths of the TR7 - you could simply use
>the passband tuning to peak an off-frequency calling station without
>having to use the RIT. In a contest, I could never remember to reset
>the RIT once tuned off center, but having the PBT tuned off of your
>normal listening offset is immediately apparent from the pitch of the
>background noise heard.
>
>While transceive operation may not be the ultimate for CW operation, a
>CW contester today would not fare well by not using transceive mode.
>
>73, Floyd

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11442. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 03:46:04 UTC
From: JD Reich
Topic: 10991 Message: 11442

Hi Garey,

I tested q4 and it had 12.5VDC on it; in the process of testing, I shorted
and released smoke on L-5. What would be a good replacement?

I will test PTO after I get it removed.

thanks
JD

On Thu, Jan 17, 2013 at 9:20 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> JD -
>
> Check the voltage at the 'other end' of that resistor just to be sure. You
> should get about 11 VDC
> on one end and 150V on the other end. The 11 VDC end is the supply for Q4
> and the PTO. IF you
> measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you have
> the Service CD yet?? Q4
> is on Board 1. If it has more than 11 VDC on it, it's blown
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> JD Reich wrote:
> > Hi Garey,
> >
> > I tested and got a reading of 105v from the top of the resistor where it
> connects to the terminal. This was using the positive lead of the
> multimeter to the terminal/top of resistor to the other side of the
> resistor where the white and red wire was soldered having my multimeter set
> to 200, measuring volts dc. The white red wire did look a bit
> brown/scorched where it was soldered to the resistor.
> > >
> > I hope I'm doing this right, and again, thanks for your guidance and
> patience.
> > >

> > JD
> >
> >
> >
> > Sent from my iPhone
> >
> > On Jan 17, 2013, at 1:50 PM, Garey Barrell k4oah@mindspring.com> wrote:
> >
> >> JD -
> >>
> >> I think we better check the +10V bus since you had 0A2 troubles.
> >>
> >> Socket V20. There is a power resistor hanging on the side of the socket
> turret of V20. The terminal
> >> at the 'top' with the resistor lead and the Wht/Red wireshould read
> about 11 VDC.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> JD Reich wrote:
> >>> Thank you Garey,
> >>>
> >>> I did confirm that the switch was switched to TCVR; it was and I
> switched
> >>> it back and forth; this was working prior to these problems.
> >>>
> >>> I did get a 0.1A plate current, but when I increased XMTR gain, the
> current
> >>> remained at 0.1a on 80, 20.
> >>>
> >>> I also cleaned the relay contact points with DeOxit, and they were a
> bit
> >>> dirty, but this did not help this particular problem.
> >>>
> >>> As far as the oscillators go, to determine if they are running or
> >>> misaligned, what would the next step be?
> >>>
> >>> thank you again and 73
> >>> JD - W0AJC
> >>>
> >>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@...
> >wrote:
> >>>
> >>>> **
> >>>>
> >>>>
> >>>> JD -
> >>>>
> >>>> OK. Let's try again.

> >>>>
> >>>> Confirm that slide switch on left side near rear is in 'TCVR'
> position.
> >>>>
> >>>> Always tune the transmitter in X-CW position, with filter switch set
> to
> >>>> 'X'. A key is not necessary
> >>>> and should NOT be plugged in.
> >>>>
> >>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of
> >>>> PLATE current. If so, then
> >>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an
> increase
> >>>> in current, then quickly
> >>>> dipthe PLATE control for minimum current.
> >>>>
> >>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
> >>>> circuit is not complete and
> >>>> will need further troubleshooting.
> >>>>
> >>>> If PLATE current does NOT increase when XMTR GAIN is increased, then
> one
> >>>> or more oscillators are not
> >>>> running, or alignment is seriously maladjusted.
> >>>>
> >>>> DeoxIT or alcoholif that's all that you have applied to a strip of
> heavy
> >>>> paper, file card or
> >>>> business card drawn through relay contacts may help. The contact on
> top,
> >>>> just to left of center, is
> >>>> the Receive contact. Insert paper and slowly withdraw. Card will
> probably
> >>>> show black stripe.
> >>>> Continue until stripe no longer appears.
> >>>>
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>>
> >>>>
> >>>> JD Reich wrote:
> >>>>> Good Morning Glen,
> >>>>>
> >>>>> Sorry for the delayed response; have just gotten around to testing.
> Thank
> >>>>> you for your help thus far; this is my first time working on this

> Drake,
> >>>> so
> >>>>> please bear with my ignorance, i.e, capacitor C79. :)
> >>>>>
> >>>>> I tested the ac-4 and am getting proper voltage to all pins
> >>>>>
> >>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
> >>>>>
> >>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
> >>>>>
> >>>>> Some history; I put a new coax input on, however the inner metal
> sleeve
> >>>> was
> >>>>> too long, shorting out with a wire just inside the rig, behind the
> coax
> >>>>> input, I believe putting the rig into transmit; by the time I
> realized
> >>>>> this, it was 30-40 seconds so unsure if this might have caused a
> >>>> problem. I
> >>>>> was getting receive after this however.
> >>>>>
> >>>>> I also attempted to tune on AM using a keyer, but hindsight, I don't
> >>>>> believe I had the correct adapter for the key to match this Drake;
> >>>> perhaps
> >>>>> that shorted something?
> >>>>>
> >>>>> Prior to this night, it was receiving and transmitting fine; with the
> >>>>> exception of a bad so-239 input was gave intermittent and scratchy
> >>>> receive
> >>>>> at times. It would also have low transmit after some transmissions,
> which
> >>>>> is why I replaced the c5 in the ac-4. Other than that, it was tuning
> up
> >>>> and
> >>>>> receiving.
> >>>>>
> >>>>> Now, I cannot get receive or power out.
> >>>>>
> >>>>>
> >>>>> The finals all have a glow to them.
> >>>>>
> >>>>> Any suggestions on the next step?
> >>>>>
> >>>>> thank you
> >>>>> JD-W0AJC
> >>>>>
> >>>>
> >>> [Non-text portions of this message have been removed]
> >>>
> >>>

> >>>
> >>> ------------------------------------
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> >>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11443. Re: [DrakeRadio] Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 10:34:55 UTC
From: Keith Evans
Topic: 11392 Message: 11443

Hi Jim, and All,
I do not like 800hz sidetone for CW, So I adjust down the CW Tx Crystal using the Trimmer adjustment via the Key Jack on the back panel, as per the manual, to a more comfortable 500hz ish tone.
On rx, especially if using the narrow filter, I listen to any cw station, and tune it in to the tone I
prefer (500hz ish), I then peak the signal using the passband tuning control. The TR7 is then set, all I have ever done is then tune into a wanted stn and call, I have never been
told I am off freq.
Sadly most rigs are now basically LSB for CW, so the TR7 Dial doesn't indicate what a Rice Box will, but if you see a Cluster Spot, just apply the offset.
I was thinking of adjusting the Variable Pot, to put the RX in the LSB Cw passband, And see if the CW Tx Crystal will adjust enough with the trimmer, to put Tx into the LSB side as well, But its still on the To Do list.
At least then the TR7 would follow modern convention, ie the Rx tone increases as the rx is tuned hf.
FWIW
Keith G3VKW

----- Original Message -----
From: Jim Shorney
To: floyd@... ; k4oah@...
Cc: DrakeRadio@yahoogroups.com ; RICHARD NAUMANN
Sent: Saturday, January 19, 2013 3:38 AM
Subject: [DrakeRadio] Re: More on my TR7

I had to draw this out on paper to get it right in my head. I think I did have the offset backwards. Here's the way it works as I think I see it, assuming PBT is off:

The center of the IF filter is 5645.0 KHz. In USB mode, the carrier is placed at 5643.6, allowing the upper sideband to pass through the IF filter. In CW mode, the "carrier" is at 5644.2, still in the USB area. This is your BFO, and this is why you listen to CW in USB mode. The CW transmit oscillator is nominally at 5645.8 according to info found in the block diagram in the service manual. This must be a misprint, because the math doesn't work out; that would give a 1.6 KHz transmit offset. The crystal is listed as 5645.0 in the BOM, which makes sense for an 800 Hz sidetone (5645.0 - 5644.2 = .8 KHz). If you tune down from zero beat of an incoming signal and go for an 800 Hz CW note, your transmitter will be on his transmit frequency. I think I've got that right now.

Perfect. Even Garey should love it. :D

Now, in order for this to work, you need to use the main dial, with RIT off. Once you have that 800 Hz offset dialed in, any subsequent tuning to avoid interference, change the tone, etc., should be done with the RIT or your other VFO (if so equipped). Don't touch that dial!. (I've been waiting to say that...).

The offset could be changed by adjusting the CW oscillator or the CW fixed passband pot. It would be a good idea to check the keying waveform if the CW oscillator is changed (or even if not). Floyd's great article on this subject is spot-on (so to speak):

http://www.wb4hfn.com/DRAKE/DrakeArticles/TR7_Key_Clicks.pdf

73

-Jim
NU0C

On Wed, 16 Jan 2013 10:54:40 -0500, Floyd Sense wrote:

>On 1/16/2013 10:05 AM, Garey Barrell wrote:
>> I don't know which way the TR-7 offsets, but I suspect it will be LSB.
>
>For the TR7, it's USB. For most modern transceivers, two CW "modes" are
>used - UCW and LCW (!). In any case, the transceiver adjusts the
>offsets and BFOs accordingly and no matter which CW mode you use, you'll
>be on the right frequency. I agree on the problem with two operators
>using different offsets and the resulting slight differences in frequency.
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>the passband tuning to peak an off-frequency calling station without
>having to use the RIT. In a contest, I could never remember to reset
>the RIT once tuned off center, but having the PBT tuned off of your
>normal listening offset is immediately apparent from the pitch of the
>background noise heard.
>
>While transceive operation may not be the ultimate for CW operation, a
>CW contester today would not fare well by not using transceive mode.
>
>73, Floyd

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

11444. Re: [DrakeRadio] Stopped transmitting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 12:25:44 UTC
From: Robert Nohren
Topic: 11432 Message: 11444

Thanks Garey. After a little troubleshooting, I found the 6ev7 tube to be faulty. Put in a new one and it's now functioning as normal.

Would over modulation from an amplified D-104 cause such a problem? That's the only thing I was messing with at the time.

When I email back, should it be to 'the group' or 'the sender' ?

Tnx for CD info.

Bob N4IBK

11445. Re: [DrakeRadio] Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 15:07:00 UTC
From: Garey Barrell
Topic: 11392 Message: 11445

Jim -

I think I have it. It's complicated, 'even for me'. :-)

So if a 'legacy' transceive station, with it's inherent 8-900 Hz_LSB_ offset comes along, the two
transmitters are going to be 1.6 kHz apart..?

The problem is these tiny filterbandwidths people use. If you're more than a couple hundred Hz
away, you might as well be on another band! Oh for the good ol days when IF's were 5-10 kHz wide..... But that's another discussion!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
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> the offset backwards. Here's the way it works as I think I see it, assuming PBT
> is off:
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> at 5643.6, allowing the upper sideband to pass through the IF filter. In CW
> mode, the "carrier" is at 5644.2, still in the USB area. This is your BFO, and
> this is why you listen to CW in USB mode. The CW transmit oscillator is
> nominally at 5645.8 according to info found in the block diagram in the service
> manual. This must be a misprint, because the math doesn't work out; that would
> give a 1.6 KHz transmit offset. The crystal is listed as 5645.0 in the BOM,
> which makes sense for an 800 Hz sidetone (5645.0 - 5644.2 = .8 KHz). If you
> tune down from zero beat of an incoming signal and go for an 800 Hz CW note,
> your transmitter will be on his transmit frequency. I think I've got that right
> now.
>
> Perfect. Even Garey should love it. :D
>
> Now, in order for this to work, you need to use the main dial, with RIT off.
> Once you have that 800 Hz offset dialed in, any subsequent tuning to avoid
> interference, change the tone, etc., should be done with the RIT or your other
> VFO (if so equipped). Don't touch that dial!. (I've been waiting to say
> that...).
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> The offset could be changed by adjusting the CW oscillator or the CW fixed

> passband pot. It would be a good idea to check the keying waveform if the CW
> oscillator is changed (or even if not). Floyd's great article on this subject
> is spot-on (so to speak):
>
> http://www.wb4hfn.com/DRAKE/DrakeArticles/TR7_Key_Clicks.pdf
>
> 73
>
> -Jim
> NU0C
>
> On Wed, 16 Jan 2013 10:54:40 -0500, Floyd Sense wrote:
>
>> On 1/16/2013 10:05 AM, Garey Barrell wrote:
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>> be on the right frequency. I agree on the problem with two operators
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>> having to use the RIT. In a contest, I could never remember to reset
>> the RIT once tuned off center, but having the PBT tuned off of your
>> normal listening offset is immediately apparent from the pitch of the
>> background noise heard.
>>
>> While transceive operation may not be the ultimate for CW operation, a
>> CW contester today would not fare well by not using transceive mode.
>>
>>

11446. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 15:33:04 UTC
From: Garey Barrell
Topic: 10991 Message: 11446

Jim -

Interesting. The Collector of Q4, the PTO supply, and one end of R140 are all tied together. The
Wht/Red wire from R140 goes toeither the PTO or Q4 Collector first and then on to the other. You
earlier said you measured 105 VDC on R140. One end will be 150 VDC, and the other should be 11-12
VDC, NOT 105. Something not right here.....

How did you smoke L5? It's on the other side of the chassis! :-) If it really is L5, we'll have to
get a replacement from a donor unit. Not a big problem, and it's only used on 15M. So when you get
it working on all but 15M, we'll know why!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

JD Reich wrote:
> Hi Garey,
>
> I tested q4 and it had 12.5VDC on it; in the process of testing, I shorted
> and released smoke on L-5. What would be a good replacement?
>
> I will test PTO after I get it removed.
>
> thanks
> JD
>
> On Thu, Jan 17, 2013 at 9:20 PM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> JD -
>>
>> Check the voltage at the 'other end' of that resistor just to be sure. You
>> should get about 11 VDC
>> on one end and 150V on the other end. The 11 VDC end is the supply for Q4
>> and the PTO. IF you
>> measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you have

>> the Service CD yet?? Q4
>> is on Board 1. If it has more than 11 VDC on it, it's blown
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> JD Reich wrote:
>>> Hi Garey,
>>>
>>> I tested and got a reading of 105v from the top of the resistor where it
>> connects to the terminal. This was using the positive lead of the
>> multimeter to the terminal/top of resistor to the other side of the
>> resistor where the white and red wire was soldered having my multimeter set
>> to 200, measuring volts dc. The white red wire did look a bit
>> brown/scorched where it was soldered to the resistor.
>>> I hope I'm doing this right, and again, thanks for your guidance and
>> patience.
>>> JD
>>>
>>>
>>>
>>> Sent from my iPhone
>>>
>>> On Jan 17, 2013, at 1:50 PM, Garey Barrell k4oah@...> wrote:
>>>
>>>> JD -
>>>>
>>>> I think we better check the +10V bus since you had 0A2 troubles.
>>>>
>>>> Socket V20. There is a power resistor hanging on the side of the socket
>> turret of V20. The terminal
>>>> at the 'top' with the resistor lead and the Wht/Red wireshould read
>> about 11 VDC.
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> JD Reich wrote:
>>>>> Thank you Garey,
>>>>>
>>>>> I did confirm that the switch was switched to TCVR; it was and I
>> switched
>>>>> it back and forth; this was working prior to these problems.
>>>>>
>>>>> I did get a 0.1A plate current, but when I increased XMTR gain, the
>> current

>>>>> remained at 0.1a on 80, 20.
>>>>>
>>>>> I also cleaned the relay contact points with DeOxit, and they were a
>> bit
>>>>> dirty, but this did not help this particular problem.
>>>>>
>>>>> As far as the oscillators go, to determine if they are running or
>>>>> misaligned, what would the next step be?
>>>>>
>>>>> thank you again and 73
>>>>> JD - W0AJC
>>>>>
>>>>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@...
>>> wrote:
>>>>>> **
>>>>>>
>>>>>>
>>>>>> JD -
>>>>>>
>>>>>> OK. Let's try again.
>>>>>>
>>>>>> Confirm that slide switch on left side near rear is in 'TCVR'
>> position.
>>>>>> Always tune the transmitter in X-CW position, with filter switch set
>> to
>>>>>> 'X'. A key is not necessary
>>>>>> and should NOT be plugged in.
>>>>>>
>>>>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A of
>>>>>> PLATE current. If so, then
>>>>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an
>> increase
>>>>>> in current, then quickly
>>>>>> dipthe PLATE control for minimum current.
>>>>>>
>>>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
>>>>>> circuit is not complete and
>>>>>> will need further troubleshooting.
>>>>>>
>>>>>> If PLATE current does NOT increase when XMTR GAIN is increased, then
>> one
>>>>>> or more oscillators are not
>>>>>> running, or alignment is seriously maladjusted.
>>>>>>
>>>>>> DeoxIT or alcoholif that's all that you have applied to a strip of
>> heavy
>>>>>> paper, file card or
>>>>>> business card drawn through relay contacts may help. The contact on
>> top,
>>>>>> just to left of center, is

>>>>>> the Receive contact. Insert paper and slowly withdraw. Card will
>> probably
>>>>>> show black stripe.
>>>>>> Continue until stripe no longer appears.
>>>>>>
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>>
>>>>>>
>>>>>> JD Reich wrote:
>>>>>>> Good Morning Glen,
>>>>>>>
>>>>>>> Sorry for the delayed response; have just gotten around to testing.
>> Thank
>>>>>>> you for your help thus far; this is my first time working on this
>> Drake,
>>>>>> so
>>>>>>> please bear with my ignorance, i.e, capacitor C79. :)
>>>>>>>
>>>>>>> I tested the ac-4 and am getting proper voltage to all pins
>>>>>>>
>>>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>>>>>>>
>>>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
>>>>>>>
>>>>>>> Some history; I put a new coax input on, however the inner metal
>> sleeve
>>>>>> was
>>>>>>> too long, shorting out with a wire just inside the rig, behind the
>> coax
>>>>>>> input, I believe putting the rig into transmit; by the time I
>> realized
>>>>>>> this, it was 30-40 seconds so unsure if this might have caused a
>>>>>> problem. I
>>>>>>> was getting receive after this however.
>>>>>>>
>>>>>>> I also attempted to tune on AM using a keyer, but hindsight, I don't
>>>>>>> believe I had the correct adapter for the key to match this Drake;
>>>>>> perhaps
>>>>>>> that shorted something?
>>>>>>>
>>>>>>> Prior to this night, it was receiving and transmitting fine; with the
>>>>>>> exception of a bad so-239 input was gave intermittent and scratchy
>>>>>> receive
>>>>>>> at times. It would also have low transmit after some transmissions,
>> which

>>>>>>> is why I replaced the c5 in the ac-4. Other than that, it was tuning
>> up
>>>>>> and
>>>>>>> receiving.
>>>>>>>
>>>>>>> Now, I cannot get receive or power out.
>>>>>>>
>>>>>>>
>>>>>>> The finals all have a glow to them.
>>>>>>>
>>>>>>> Any suggestions on the next step?
>>>>>>>
>>>>>>> thank you
>>>>>>> JD-W0AJC
>>>>>>>
>>>>> [Non-text portions of this message have been removed]
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>>>>> ------------------------------------
>>>>>
>>>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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>

11447. AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 15:43:53 UTC
From: k5fex
Topic: 11447 Message: 11447

Anyone know a source for the multiconductor power cable? It is a 12 conductor cable with one of the 12 being a one wire shielded audio cable. Need to replace cable on PS.

Thanks,
Wayne
K5FEX

11448. Re: [DrakeRadio] Stopped transmitting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 16:05:37 UTC
From: Garey Barrell
Topic: 11432 Message: 11448

Bob -

OK. No, there is no connection between an amplified D-104 and the 6EV7 failure. The 6EV7 is a
'power' tube, and they do get gassy after a while. There seems to be a rash of them lately, perhaps
they're all running down at about the same time! :-)

Adjust the GAIN control on the transmitter to about 10:30/11:00, then bring up the gain pot in the
D104 for about 10-15W output on peaks. The transmitter handles overmodulation pretty well, the ALC
is reasonably effective, but overmodulation is never a good idea!

I prefer that you reply to the List. This adds any information you contribute to the Archives of the
list, and will put a little knowledge book mark in some otherlist members.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Robert Nohren wrote:
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>
> a new one and it's now functioning as normal.
>
> Would over modulation from an amplified D-104 cause such a problem? That's the
>
> only thing I was messing with at the time.
>
> When I email back, should it be to 'the group' or 'the sender' ?
>
> Tnx for CD info.
>
> Bob N4IBK
>

11449. Re: [DrakeRadio] Re: More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 18:43:19 UTC
From: Jim Shorney
Topic: 11392 Message: 11449

Geez, Garey, you are asking me to *think* again. Without thinking too much, I suppose it could happen if both stations did everything wrong. It seems to me, though, that as long as your transmit frequency is reasonably close to zero beat with the other station's transmit frequency, he should hear you regardless of his offset.

73

-Jim
NU0C

On Sat, 19 Jan 2013 10:07:00 -0500, Garey Barrell wrote:

>Jim -
>
>I think I have it. It's complicated, 'even for me'. :-)
>
>So if a 'legacy' transceive station, with it's inherent 8-900 Hz_LSB_ offset comes along, the two
>transmitters are going to be 1.6 kHz apart..?
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>The problem is these tiny filterbandwidths people use. If you're more than a couple hundred Hz
>away, you might as well be on another band! Oh for the good ol days when IF's were 5-10 kHz
>wide.............. But that's another discussion!
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>73, Garey - K4OAH
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>> this is why you listen to CW in USB mode. The CW transmit oscillator is
>> nominally at 5645.8 according to info found in the block diagram in the service
>> manual. This must be a misprint, because the math doesn't work out; that would
>> give a 1.6 KHz transmit offset. The crystal is listed as 5645.0 in the BOM,

>> which makes sense for an 800 Hz sidetone (5645.0 - 5644.2 = .8 KHz). If you
>> tune down from zero beat of an incoming signal and go for an 800 Hz CW note,
>> your transmitter will be on his transmit frequency. I think I've got that right
>> now.
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>> Perfect. Even Garey should love it. :D
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>> Now, in order for this to work, you need to use the main dial, with RIT off.
>> Once you have that 800 Hz offset dialed in, any subsequent tuning to avoid
>> interference, change the tone, etc., should be done with the RIT or your other
>> VFO (if so equipped). Don't touch that dial!. (I've been waiting to say
>> that...).
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>> The offset could be changed by adjusting the CW oscillator or the CW fixed
>> passband pot. It would be a good idea to check the keying waveform if the CW
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>> 73
>>
>> -Jim
>> NU0C
>>
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>>> background noise heard.
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>>> While transceive operation may not be the ultimate for CW operation, a
>>> CW contester today would not fare well by not using transceive mode.
>>>
>>>
>
>

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

11450. Re: [DrakeRadio] More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 19:13:33 UTC
From: Brenton Crowhurst
Topic: 11392 Message: 11450

I'm glad I'm not the only one who gets a bit confused about this.

But just when I thought I had it straight in my mind, I'm now confused about it.

I thought the transmitter was transmitting 800 hz higher than the receiver was listening, and that the digital display was giving the accurate receive frequency. With that understanding in mind, I was setting my RIT 800 hz high, and tuning cw signals to where there was no tone--is that called zero beat? -- then I'd turn off the RIT, and figured I was dead on frequency.

Do I have this wrong?

Thanks in advance to anyone who can help me get a proper brain alignment on this issue.

Brenton "Don't Revoke My Ticket" Crowhurst,
VE6IE

On 2013-01-18, at 8:38 PM, Jim Shorney wrote:

>
> I had to draw this out on paper to get it right in my head. I think I did have
> the offset backwards. Here's the way it works as I think I see it, assuming PBT
> is off:
>
> The center of the IF filter is 5645.0 KHz. In USB mode, the carrier is placed
> at 5643.6, allowing the upper sideband to pass through the IF filter. In CW
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> 73
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> -Jim
> NU0C
>
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>
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> >CW contester today would not fare well by not using transceive mode.
> > >
> >73, Floyd
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain
3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

11451. Re: [DrakeRadio] More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 19:33:49 UTC
From: Gary Woods
Topic: 11392 Message: 11451

On Sat, 19 Jan 2013 12:13:33 -0700, you wrote:

>
>Thanks in advance to anyone who can help me get a proper brain alignment on this issue.

What I always did is this:
Tune in the other station so the pitch is exactly the same as your sidetone
(turn the carrier to zero; tap the key). IIRC, the sidetone is actually
made by the TX oscillator through the same conversion as the incoming
signals, so you're as close as your ear's pitch sense allows. In my case,
with a little musical training, that's within a very few cycles.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

11452. Re: [DrakeRadio] More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 19:46:36 UTC
From: Brenton Crowhurst
Topic: 11392 Message: 11452

Thanks Gary, I'll give that a try!

Sent from my iPad

On 2013-01-19, at 12:33 PM, Gary Woods <garygarlic@...> wrote:

> On Sat, 19 Jan 2013 12:13:33 -0700, you wrote:
>
> >
> >Thanks in advance to anyone who can help me get a proper brain alignment on this issue.
>
> What I always did is this:
> Tune in the other station so the pitch is exactly the same as your sidetone
> (turn the carrier to zero; tap the key). IIRC, the sidetone is actually
> made by the TX oscillator through the same conversion as the incoming
> signals, so you're as close as your ear's pitch sense allows. In my case,
> with a little musical training, that's within a very few cycles.
>
> --
> Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
> Zone 5/4 in upstate New York, 1420' elevation. NY WO G
>

[Non-text portions of this message have been removed]

11453. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 23:01:44 UTC
From: JD Reich
Topic: 10991 Message: 11453

Hi Garey,

I was looking at the 9-nb schematic, and was trying to test q-4 on this board which on my schematic was close to l5. Wow, am I making this worse! Certainly am being humbled, but I really don't want to have to give in and send it for repairs.

I retested r140 (this is the power resistor, correct?) and got a reading of 153.5 at the top (nearest tube) and 46.4 at the bottom. I followed the red-white to the PTO and am getting 46.4 there as well.

JD

On Sat, Jan 19, 2013 at 9:33 AM, Garey Barrell <k4oah@mindspring.com> wrote:

> **
>
>
> Jim -
>
> Interesting. The Collector of Q4, the PTO supply, and one end of R140 are
> all tied together. The
> Wht/Red wire from R140 goes toeither the PTO or Q4 Collector first and
> then on to the other. You
> earlier said you measured 105 VDC on R140. One end will be 150 VDC, and
> the other should be 11-12
> VDC, NOT 105. Something not right here.....
>
> How did you smoke L5? It's on the other side of the chassis! :-) If it
> really is L5, we'll have to
> get a replacement from a donor unit. Not a big problem, and it's only used
> on 15M. So when you get
> it working on all but 15M, we'll know why!
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> JD Reich wrote:
> > Hi Garey,
> >
> > I tested q4 and it had 12.5VDC on it; in the process of testing, I

> shorted
> > and released smoke on L-5. What would be a good replacement?
> >
> > I will test PTO after I get it removed.
> >
> > thanks
> > JD
> >
> > On Thu, Jan 17, 2013 at 9:20 PM, Garey Barrell k4oah@...>
> wrote:
> >
> >> **
>
> >>
> >>
> >> JD -
> >>
> >> Check the voltage at the 'other end' of that resistor just to be sure.
> You
> >> should get about 11 VDC
> >> on one end and 150V on the other end. The 11 VDC end is the supply for
> Q4
> >> and the PTO. IF you
> >> measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you have
> >> the Service CD yet?? Q4
> >> is on Board 1. If it has more than 11 VDC on it, it's blown
> >>
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> JD Reich wrote:
> >>> Hi Garey,
> >>>
> >>> I tested and got a reading of 105v from the top of the resistor where
> it
> >> connects to the terminal. This was using the positive lead of the
> >> multimeter to the terminal/top of resistor to the other side of the
> >> resistor where the white and red wire was soldered having my multimeter
> set
> >> to 200, measuring volts dc. The white red wire did look a bit
> >> brown/scorched where it was soldered to the resistor.
> >>> I hope I'm doing this right, and again, thanks for your guidance and
> >> patience.
> >>> JD
> >>>

> >>>
> >>>
> >>> Sent from my iPhone
> >>>
> >>> On Jan 17, 2013, at 1:50 PM, Garey Barrell k4oah@...>
> wrote:
> >>>
> >>>> JD -
> >>>>
> >>>> I think we better check the +10V bus since you had 0A2 troubles.
> >>>>
> >>>> Socket V20. There is a power resistor hanging on the side of the
> socket
> >> turret of V20. The terminal
> >>>> at the 'top' with the resistor lead and the Wht/Red wireshould read
> >> about 11 VDC.
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> JD Reich wrote:
> >>>>> Thank you Garey,
> >>>>>
> >>>>> I did confirm that the switch was switched to TCVR; it was and I
> >> switched
> >>>>> it back and forth; this was working prior to these problems.
> >>>>>
> >>>>> I did get a 0.1A plate current, but when I increased XMTR gain, the
> >> current
> >>>>> remained at 0.1a on 80, 20.
> >>>>>
> >>>>> I also cleaned the relay contact points with DeOxit, and they were a
> >> bit
> >>>>> dirty, but this did not help this particular problem.
> >>>>>
> >>>>> As far as the oscillators go, to determine if they are running or
> >>>>> misaligned, what would the next step be?
> >>>>>
> >>>>> thank you again and 73
> >>>>> JD - W0AJC
> >>>>>
> >>>>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@mindspring.com
> >>> wrote:
> >>>>>> **
> >>>>>>
> >>>>>>
> >>>>>> JD -
> >>>>>>
> >>>>>> OK. Let's try again.
> >>>>>>
> >>>>>> Confirm that slide switch on left side near rear is in 'TCVR'

> >> position.
> >>>>>> Always tune the transmitter in X-CW position, with filter switch set
> >> to
> >>>>>> 'X'. A key is not necessary
> >>>>>> and should NOT be plugged in.
> >>>>>>
> >>>>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A
> of
> >>>>>> PLATE current. If so, then
> >>>>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an
> >> increase
> >>>>>> in current, then quickly
> >>>>>> dipthe PLATE control for minimum current.
> >>>>>>
> >>>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
> >>>>>> circuit is not complete and
> >>>>>> will need further troubleshooting.
> >>>>>>
> >>>>>> If PLATE current does NOT increase when XMTR GAIN is increased, then
> >> one
> >>>>>> or more oscillators are not
> >>>>>> running, or alignment is seriously maladjusted.
> >>>>>>
> >>>>>> DeoxIT or alcoholif that's all that you have applied to a strip of
> >> heavy
> >>>>>> paper, file card or
> >>>>>> business card drawn through relay contacts may help. The contact on
> >> top,
> >>>>>> just to left of center, is
> >>>>>> the Receive contact. Insert paper and slowly withdraw. Card will
> >> probably
> >>>>>> show black stripe.
> >>>>>> Continue until stripe no longer appears.
> >>>>>>
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>>
> >>>>>>
> >>>>>> JD Reich wrote:
> >>>>>>> Good Morning Glen,
> >>>>>>>
> >>>>>>> Sorry for the delayed response; have just gotten around to testing.
> >> Thank
> >>>>>>> you for your help thus far; this is my first time working on this
> >> Drake,
> >>>>>> so

> >>>>>>> please bear with my ignorance, i.e, capacitor C79. :)
> >>>>>>>
> >>>>>>> I tested the ac-4 and am getting proper voltage to all pins
> >>>>>>>
> >>>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
> >>>>>>>
> >>>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
> >>>>>>>
> >>>>>>> Some history; I put a new coax input on, however the inner metal
> >> sleeve
> >>>>>> was
> >>>>>>> too long, shorting out with a wire just inside the rig, behind the
> >> coax
> >>>>>>> input, I believe putting the rig into transmit; by the time I
> >> realized
> >>>>>>> this, it was 30-40 seconds so unsure if this might have caused a
> >>>>>> problem. I
> >>>>>>> was getting receive after this however.
> >>>>>>>
> >>>>>>> I also attempted to tune on AM using a keyer, but hindsight, I
> don't
> >>>>>>> believe I had the correct adapter for the key to match this Drake;
> >>>>>> perhaps
> >>>>>>> that shorted something?
> >>>>>>>
> >>>>>>> Prior to this night, it was receiving and transmitting fine; with
> the
> >>>>>>> exception of a bad so-239 input was gave intermittent and scratchy
> >>>>>> receive
> >>>>>>> at times. It would also have low transmit after some transmissions,
> >> which
> >>>>>>> is why I replaced the c5 in the ac-4. Other than that, it was
> tuning
> >> up
> >>>>>> and
> >>>>>>> receiving.
> >>>>>>>
> >>>>>>> Now, I cannot get receive or power out.
> >>>>>>>
> >>>>>>>
> >>>>>>> The finals all have a glow to them.
> >>>>>>>
> >>>>>>> Any suggestions on the next step?
> >>>>>>>
> >>>>>>> thank you
> >>>>>>> JD-W0AJC
> >>>>>>>
> >>>>> [Non-text portions of this message have been removed]
> >>>>>
> >>>>>

> >>>>>
> >>>>> ------------------------------------
> >>>>>
> >>>>> Yahoo! Groups Links
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>> [Non-text portions of this message have been removed]
> >>>
> >>>
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> > ------------------------------------
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>

[Non-text portions of this message have been removed]

11454. Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 23:07:23 UTC
From: k5fex
Topic: 11447 Message: 11454

Did Drake have the cable custom made? Have not found a replacement vendor.

--- In DrakeRadio@yahoogroups.com, "k5fex" wrote:
>
> Anyone know a source for the multiconductor power cable? It is a 12 conductor cable with one of the 12 being a one wire shielded audio cable. Need to replace cable on PS.
>
> Thanks,
> Wayne
> K5FEX
>

11455. Complete C Line Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 21:37:48 UTC
From: c a
Topic: 11455 Message: 11455

T4XC - S/N 27704
R4C - S/N 26371 500HZ and 1.5KHZ filers XTALS added for 160, 30, 17, 12M
MN-2000 matching network
AC4 AC Supply
MS4 Speaker enslosure
W4 Wattmeter
Shure 450 mic wired for T4XC

Transmitter, Receiver and AC4 Supply recently refurbished by WA8SAJ Jeff Covelli. Supply had discrete caps and new diodes. Appears original inside. Have documentation to support work done. This is not museum quality gear, but is in excellent shape. Top of MS4 has a couple of scratches. TX and RX have excellent finish and front panels. All blue filters and diffusers replaced and white pointers on knobs repainted. All interconnection cables and manual reprints.

Asking $995 for all but will negotiate on price and could meet on Interstate 81 corridor in VA or elsewhere in Southeast.

Send email direct ni4z at arrl dot net and do not reply on this forum. Will furnish photos and phone numbers. I do not check this Yahoo address frequently so PLEASE email to above if interested.

Thanks,

Condy NI4Z
Alabama

11456. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 23:47:57 UTC
From: Garey Barrell
Topic: 10991 Message: 11456

JD -

You really need my CD for the TR-4C if you plan to work on this radio. It's way too complex to
follow otherwise.

I've lost track of the s/n of your radio. I've got four of these 'projects' going currently and
they tend to run together!

46 VDC on the PTO is NOT a good thing.

73, Garey - K4OAH
Glen Allen, VA
Drake Service Supplement CDs for
2-B, 2-C/NT, A, B and C-Line,
TR-4 and TR-4C

JD Reich wrote:
> Hi Garey,
>
> I was looking at the 9-nb schematic, and was trying to test q-4 on this
> board which on my schematic was close to l5. Wow, am I making this worse!
> Certainly am being humbled, but I really don't want to have to give in and
> send it for repairs.
>
> I retested r140 (this is the power resistor, correct?) and got a reading of
> 153.5 at the top (nearest tube) and 46.4 at the bottom. I followed the
> red-white to the PTO and am getting 46.4 there as well.
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> JD
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> On Sat, Jan 19, 2013 at 9:33 AM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Jim -
>>
>> Interesting. The Collector of Q4, the PTO supply, and one end of R140 are
>> all tied together. The
>> Wht/Red wire from R140 goes toeither the PTO or Q4 Collector first and
>> then on to the other. You
>> earlier said you measured 105 VDC on R140. One end will be 150 VDC, and

>> the other should be 11-12
>> VDC, NOT 105. Something not right here..........
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>> How did you smoke L5? It's on the other side of the chassis! :-) If it
>> really is L5, we'll have to
>> get a replacement from a donor unit. Not a big problem, and it's only used
>> on 15M. So when you get
>> it working on all but 15M, we'll know why!
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>> 73, Garey - K4OAH
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>> JD Reich wrote:
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>>> and released smoke on L-5. What would be a good replacement?
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>>> I will test PTO after I get it removed.
>>>
>>> thanks
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>>>> Check the voltage at the 'other end' of that resistor just to be sure.
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>>>>>>>> in current, then quickly
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>>>>>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
>>>>>>>> circuit is not complete and
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>>>>>>>> If PLATE current does NOT increase when XMTR GAIN is increased, then
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>>>>>>>> DeoxIT or alcoholif that's all that you have applied to a strip of
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>>>>>>>> business card drawn through relay contacts may help. The contact on
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>>>>>>>> show black stripe.
>>>>>>>> Continue until stripe no longer appears.

>>>>>>>>
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>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>>>>>> JD Reich wrote:
>>>>>>>>> Good Morning Glen,
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>>>>>>>>> Sorry for the delayed response; have just gotten around to testing.
>>>> Thank
>>>>>>>>> you for your help thus far; this is my first time working on this
>>>> Drake,
>>>>>>>>> so
>>>>>>>>> please bear with my ignorance, i.e, capacitor C79. :)
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>>>>>>>>> I tested the ac-4 and am getting proper voltage to all pins
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>>>>>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>>>>>>>>>
>>>>>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
>>>>>>>>>
>>>>>>>>> Some history; I put a new coax input on, however the inner metal
>>>> sleeve
>>>>>>>>> was
>>>>>>>>> too long, shorting out with a wire just inside the rig, behind the
>>>> coax
>>>>>>>>> input, I believe putting the rig into transmit; by the time I
>>>> realized
>>>>>>>>> this, it was 30-40 seconds so unsure if this might have caused a
>>>>>>>>> problem. I
>>>>>>>>> was getting receive after this however.
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>>>>>>>>> I also attempted to tune on AM using a keyer, but hindsight, I
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>>>>>>>>> believe I had the correct adapter for the key to match this Drake;
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>>>>>>>>> at times. It would also have low transmit after some transmissions,
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>>>>>>>>> is why I replaced the c5 in the ac-4. Other than that, it was
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>>>>>>>>> receiving.
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>>>>>>>>> Now, I cannot get receive or power out.
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>>>>>>>>> The finals all have a glow to them.
>>>>>>>>>
>>>>>>>>> Any suggestions on the next step?
>>>>>>>>>
>>>>>>>>> thank you
>>>>>>>>> JD-W0AJC
>>>>>>>>>
>>>>>>>>

11457. Re: [DrakeRadio] More on my TR7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-19 23:55:46 UTC
From: Jim Shorney
Topic: 11392 Message: 11457

On Sat, 19 Jan 2013 12:13:33 -0700, Brenton Crowhurst wrote:

>I thought the transmitter was transmitting 800 hz higher than the receiver was listening, and that the digital display was giving the accurate receive frequency. With that understanding in mind, I was setting my RIT 800 hz high, and tuning cw signals to where there was no tone--is that called zero beat? -- then I'd turn off the RIT, and figured I was dead on frequency.

That should work fine. Gary's suggestion also should work, it amounts to the same thing in the end. If you're working people, it's right.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11458. My C line station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 00:00:13 UTC
From: Kevin Berlen, K9HX
Topic: 11458 Message: 11458

I had to jump on here a post a quick note. Recently, I have assembled
a station of C line twins. I have been a ham for 39 years, and have
wanted a set of these rigs
since I first saw them at a fellow hams house when I had my Novice ticket.

I have not been on HF other than for Field Day for many years. The
receiver was in good condition when it arrived. The PTO on the
transmitter was stuck, and
is now freed up, but will require more work to make it right. I
ordered the interconnecting cables, a Shure 450 desk mic and mic
connector. and put everything
together.

Today, with the help of my son, I constructed and put up a 20 meter
vertical. I assembled the rigs with all of the interconnects, ran the
antenna in and hooked
it up. To my surprise, I found the NA QSO Part in full swing. I tuned
up and cautiously went back to a station in New England, and got an
immediate return, and
the op made the comment "nice signal".

Just wonderful to have a set of these great rigs. I have several more
things to do. All the switches need a good cleaning, and I need to
touch up the alignment,
as received signals drop off about 2 S units when switching from the
RX to the TX PTO, and I need to sort out the stiff TX PTO. I also
have an AC4R power supply
upgrade on order as well. I would like to have had a casual
conversation and ask for a more critical signal report, but the
middle of a contest is not a good time
for this. There will be time for that later.

Thanks to all who make this list a great resource for these great radios. 73,

Kevin, K9HX

11459. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 00:48:39 UTC
From: Don Cunningham
Topic: 11447 Message: 11459

Wayne,

I did some looking too, thinking I had seen the cable. What I found was cable for the Drake amps (L4B and L7) from John Kriner. Search "tr7dude" on your search engine (no quotes, of course) and you will find his Ebay store. I would email him to see if he has a vendor. Also, Joel, of The RF Connection has some cable for the Collins AC supply, so an email to him might help as well. Other than that, no sources from here.
73, and let us know if you find a source!

Don, WB5HAK

[Non-text portions of this message have been removed]

11460. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 02:29:52 UTC
From: JD Reich
Topic: 10991 Message: 11460

Thanks Garey, I am doing that now. I originally thought it was simply the manual on cd, but now took the time to look and it certainly is much more! I'll order, acquaint myself and then get back to you.
Thank you again for the time you've taken in helping.
JD
W0AJC

Sent from my iPhone

On Jan 19, 2013, at 5:47 PM, Garey Barrell <k4oah@...> wrote:

> JD -
>
> You really need my CD for the TR-4C if you plan to work on this radio. It's way too complex to
> follow otherwise.
>
> I've lost track of the s/n of your radio. I've got four of these 'projects' going currently and
> they tend to run together!
>
> 46 VDC on the PTO is NOT a good thing.
>
> 73, Garey - K4OAH
> Glen Allen, VA
> Drake Service Supplement CDs for
> 2-B, 2-C/NT, A, B and C-Line,
> TR-4 and TR-4C
>
> JD Reich wrote:
> > Hi Garey,
> >
> > I was looking at the 9-nb schematic, and was trying to test q-4 on this
> > board which on my schematic was close to l5. Wow, am I making this worse!
> > Certainly am being humbled, but I really don't want to have to give in and
> > send it for repairs.
> >
> > I retested r140 (this is the power resistor, correct?) and got a reading of
> > 153.5 at the top (nearest tube) and 46.4 at the bottom. I followed the
> > red-white to the PTO and am getting 46.4 there as well.
> >
> > JD
> >
> >
> >
> > On Sat, Jan 19, 2013 at 9:33 AM, Garey Barrell k4oah@...> wrote:

> >
> >> **
> >>
> >>
> >> Jim -
> >>
> >> Interesting. The Collector of Q4, the PTO supply, and one end of R140 are
> >> all tied together. The
> >> Wht/Red wire from R140 goes toeither the PTO or Q4 Collector first and
> >> then on to the other. You
> >> earlier said you measured 105 VDC on R140. One end will be 150 VDC, and
> >> the other should be 11-12
> >> VDC, NOT 105. Something not right here.....
> >>
> >> How did you smoke L5? It's on the other side of the chassis! :-) If it
> >> really is L5, we'll have to
> >> get a replacement from a donor unit. Not a big problem, and it's only used
> >> on 15M. So when you get
> >> it working on all but 15M, we'll know why!
> >>
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> JD Reich wrote:
> >>> Hi Garey,
> >>>
> >>> I tested q4 and it had 12.5VDC on it; in the process of testing, I
> >> shorted
> >>> and released smoke on L-5. What would be a good replacement?
> >>>
> >>> I will test PTO after I get it removed.
> >>>
> >>> thanks
> >>> JD
> >>>
> >>> On Thu, Jan 17, 2013 at 9:20 PM, Garey Barrell k4oah@...>
> >> wrote:
> >>>> **
> >>>>
> >>>> JD -
> >>>>
> >>>> Check the voltage at the 'other end' of that resistor just to be sure.
> >> You
> >>>> should get about 11 VDC
> >>>> on one end and 150V on the other end. The 11 VDC end is the supply for

> >> Q4
> >>>> and the PTO. IF you
> >>>> measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you have
> >>>> the Service CD yet?? Q4
> >>>> is on Board 1. If it has more than 11 VDC on it, it's blown
> >>>>
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>>
> >>>>
> >>>> JD Reich wrote:
> >>>>> Hi Garey,
> >>>>>
> >>>>> I tested and got a reading of 105v from the top of the resistor where
> >> it
> >>>> connects to the terminal. This was using the positive lead of the
> >>>> multimeter to the terminal/top of resistor to the other side of the
> >>>> resistor where the white and red wire was soldered having my multimeter
> >> set
> >>>> to 200, measuring volts dc. The white red wire did look a bit
> >>>> brown/scorched where it was soldered to the resistor.
> >>>>> I hope I'm doing this right, and again, thanks for your guidance and
> >>>> patience.
> >>>>> JD
> >>>>>
> >>>>>
> >>>>>
> >>>>> Sent from my iPhone
> >>>>>
> >>>>> On Jan 17, 2013, at 1:50 PM, Garey Barrell k4oah@...>
> >> wrote:
> >>>>>> JD -
> >>>>>>
> >>>>>> I think we better check the +10V bus since you had 0A2 troubles.
> >>>>>>
> >>>>>> Socket V20. There is a power resistor hanging on the side of the
> >> socket
> >>>> turret of V20. The terminal
> >>>>>> at the 'top' with the resistor lead and the Wht/Red wireshould read
> >>>> about 11 VDC.
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> JD Reich wrote:
> >>>>>>> Thank you Garey,
> >>>>>>>

> >>>>>>> I did confirm that the switch was switched to TCVR; it was and I
> >>>> switched
> >>>>>>> it back and forth; this was working prior to these problems.
> >>>>>>>
> >>>>>>> I did get a 0.1A plate current, but when I increased XMTR gain, the
> >>>> current
> >>>>>>> remained at 0.1a on 80, 20.
> >>>>>>>
> >>>>>>> I also cleaned the relay contact points with DeOxit, and they were a
> >>>> bit
> >>>>>>> dirty, but this did not help this particular problem.
> >>>>>>>
> >>>>>>> As far as the oscillators go, to determine if they are running or
> >>>>>>> misaligned, what would the next step be?
> >>>>>>>
> >>>>>>> thank you again and 73
> >>>>>>> JD - W0AJC
> >>>>>>>
> >>>>>>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell k4oah@...
> >>>>> wrote:
> >>>>>>>> **
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> JD -
> >>>>>>>>
> >>>>>>>> OK. Let's try again.
> >>>>>>>>
> >>>>>>>> Confirm that slide switch on left side near rear is in 'TCVR'
> >>>> position.
> >>>>>>>> Always tune the transmitter in X-CW position, with filter switch set
> >>>> to
> >>>>>>>> 'X'. A key is not necessary
> >>>>>>>> and should NOT be plugged in.
> >>>>>>>>
> >>>>>>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get 0.1A
> >> of
> >>>>>>>> PLATE current. If so, then
> >>>>>>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an
> >>>> increase
> >>>>>>>> in current, then quickly
> >>>>>>>> dipthe PLATE control for minimum current.
> >>>>>>>>
> >>>>>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0, PA
> >>>>>>>> circuit is not complete and
> >>>>>>>> will need further troubleshooting.
> >>>>>>>>
> >>>>>>>> If PLATE current does NOT increase when XMTR GAIN is increased, then
> >>>> one
> >>>>>>>> or more oscillators are not
> >>>>>>>> running, or alignment is seriously maladjusted.

> >>>>>>>>
> >>>>>>>> DeoxIT or alcoholif that's all that you have applied to a strip of
> >>>> heavy
> >>>>>>>> paper, file card or
> >>>>>>>> business card drawn through relay contacts may help. The contact on
> >>>> top,
> >>>>>>>> just to left of center, is
> >>>>>>>> the Receive contact. Insert paper and slowly withdraw. Card will
> >>>> probably
> >>>>>>>> show black stripe.
> >>>>>>>> Continue until stripe no longer appears.
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> 73, Garey - K4OAH
> >>>>>>>> Glen Allen, VA
> >>>>>>>>
> >>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> JD Reich wrote:
> >>>>>>>>> Good Morning Glen,
> >>>>>>>>>
> >>>>>>>>> Sorry for the delayed response; have just gotten around to testing.
> >>>> Thank
> >>>>>>>>> you for your help thus far; this is my first time working on this
> >>>> Drake,
> >>>>>>>> so
> >>>>>>>>> please bear with my ignorance, i.e, capacitor C79. :)
> >>>>>>>>>
> >>>>>>>>> I tested the ac-4 and am getting proper voltage to all pins
> >>>>>>>>>
> >>>>>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
> >>>>>>>>>
> >>>>>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
> >>>>>>>>>
> >>>>>>>>> Some history; I put a new coax input on, however the inner metal
> >>>> sleeve
> >>>>>>>> was
> >>>>>>>>> too long, shorting out with a wire just inside the rig, behind the
> >>>> coax
> >>>>>>>>> input, I believe putting the rig into transmit; by the time I
> >>>> realized
> >>>>>>>>> this, it was 30-40 seconds so unsure if this might have caused a
> >>>>>>>> problem. I
> >>>>>>>>> was getting receive after this however.
> >>>>>>>>>
> >>>>>>>>> I also attempted to tune on AM using a keyer, but hindsight, I
> >> don't
> >>>>>>>>> believe I had the correct adapter for the key to match this Drake;

> >>>>>>>> perhaps
> >>>>>>>> that shorted something?
> >>>>>>>>
> >>>>>>>> Prior to this night, it was receiving and transmitting fine; with
> >> the
> >>>>>>>> exception of a bad so-239 input was gave intermittent and scratchy
> >>>>>>>> receive
> >>>>>>>> at times. It would also have low transmit after some transmissions,
> >>>> which
> >>>>>>>> is why I replaced the c5 in the ac-4. Other than that, it was
> >> tuning
> >>>> up
> >>>>>>>> and
> >>>>>>>> receiving.
> >>>>>>>>
> >>>>>>>> Now, I cannot get receive or power out.
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> The finals all have a glow to them.
> >>>>>>>>
> >>>>>>>> Any suggestions on the next step?
> >>>>>>>>
> >>>>>>>> thank you
> >>>>>>>> JD-W0AJC
> >>>>>>>>
> >>>>>>>
>
>
> Reply via web post Reply to sender Reply to group Start a New Topic Messages in this topic (1

[Non-text portions of this message have been removed]

11461. WTB: 40 Meter Crystal for 2-NT

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 03:14:32 UTC
From: Darrell Bellerive
Topic: 11461 Message: 11461

I am looking for a 40 meter crystal to test a 2-NT transmitter. Anywhere between 7.002 and 7.083 MHz.

73, Darrell VA7TO

--
Darrell Bellerive

11462. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 09:30:34 UTC
From: g4jss@tiscali.co.uk
Topic: 11447 Message: 11462

Hi
Going bacvk a few years had same problem on another make of rig. I finished up by getting some from a caravan (trailer) dealer. It is
used for connecting all the trailer lighting etc. to the car. Not sure about the screened audio lead though.
Cheers
Vic

11463. RE: [DrakeRadio] Complete C Line Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 15:16:12 UTC
From: Wayne Bethoney
Topic: 11455 Message: 11463

Condy, Am interested in the twins less the MN2000, W4 and the Mic. I just passed and a loaded set on e-ham for 600.00 Will you take same? If so, I could grab it from you on my way to Atlanta? Wayne/WC1C
To: DrakeRadio@yahoogroups.com
From: tec_wrtr@...
Date: Sat, 19 Jan 2013 21:37:48 +0000
Subject: [DrakeRadio] Complete C Line Station

T4XC - S/N 27704

R4C - S/N 26371 500HZ and 1.5KHZ filers XTALS added for 160, 30, 17, 12M

MN-2000 matching network

AC4 AC Supply

MS4 Speaker enslosure

W4 Wattmeter

Shure 450 mic wired for T4XC

Transmitter, Receiver and AC4 Supply recently refurbished by WA8SAJ Jeff Covelli. Supply had discrete caps and new diodes. Appears original inside. Have documentation to support work done. This is not museum quality gear, but is in excellent shape. Top of MS4 has a couple of scratches. TX and RX have excellent finish and front panels. All blue filters and diffusers replaced and white pointers on knobs repainted. All interconnection cables and manual reprints.

Asking $995 for all but will negotiate on price and could meet on Interstate 81 corridor in VA or elsewhere in Southeast.

Send email direct ni4z at arrl dot net and do not reply on this forum. Will furnish photos and phone numbers. I do not check this Yahoo address frequently so PLEASE email to above if interested.

Thanks,

Condy NI4Z

Alabama

[Non-text portions of this message have been removed]

11464. Re: Complete C Line Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-20 17:44:51 UTC
From: c a
Topic: 11455 Message: 11464

You may email me to discuss. I will NOT discuss on this message board.
ni4z at arrl dot net otherwise NO!

--- In DrakeRadio@yahoogroups.com, Wayne Bethoney wrote:
>
>
> Condy, Am interested in the twins less the MN2000, W4 and the Mic. I just passed and a loaded set on e-ham for 600.00 Will you take same? If so, I could grab it from you on my way to Atlanta? Wayne/WC1C
> To: DrakeRadio@yahoogroups.com
> From: tec_wrtr@...
> Date: Sat, 19 Jan 2013 21:37:48 +0000
> Subject: [DrakeRadio] Complete C Line Station
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>
> T4XC - S/N 27704
>
> R4C - S/N 26371 500HZ and 1.5KHZ filers XTALS added for 160, 30, 17, 12M
>
> MN-2000 matching network
>

> AC4 AC Supply
>
> MS4 Speaker enslosure
>
> W4 Wattmeter
>
> Shure 450 mic wired for T4XC
>
>
>
> Transmitter, Receiver and AC4 Supply recently refurbished by WA8SAJ Jeff Covelli. Supply had discrete caps and new diodes. Appears original inside. Have documentation to support work done. This is not museum quality gear, but is in excellent shape. Top of MS4 has a couple of scratches. TX and RX have excellent finish and front panels. All blue filters and diffusers replaced and white pointers on knobs repainted. All interconnection cables and manual reprints.
>
>
>
> Asking $995 for all but will negotiate on price and could meet on Interstate 81 corridor in VA or elsewhere in Southeast.
>
>
>
> Send email direct ni4z at arrl dot net and do not reply on this forum. Will furnish photos and phone numbers. I do not check this Yahoo address frequently so PLEASE email to above if interested.
>
>
>
> Thanks,
>
>
>
> Condy NI4Z
>
> Alabama
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> [Non-text portions of this message have been removed]
>

11465. Re: [DrakeRadio] AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 05:04:46 UTC
From: Ethan Blanton
Topic: 11447 Message: 11465

k5fex spake unto us the following wisdom:
> Anyone know a source for the multiconductor power cable? It is a 12
> conductor cable with one of the 12 being a one wire shielded audio
> cable. Need to replace cable on PS.

If it makes your buy easier, the factory cable does not have the
shielded audio cable inside the bundle. Instead, the cinch-jones
connector has two cables coming out of it, one multiconductor and one
short (maybe 4-6") shielded audio with an RCA female plug on it. The
MS-4 and RV-4 both have a shielded audio cable with a male RCA that
mates with it.

Ethan

11466. Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 12:31:31 UTC
From: k5fex
Topic: 11447 Message: 11466

Yes Ethan, there is a 4-6" audio cable coming OUT of the CJ connector. And, YES there is a shielded single conductor INSIDE the bundle. The single shielded line supplies the transmitter AGC line for connection to the L4 series of amplifiers (or any other amp). The pigtail of which you spoke simply feeds audio out of the transmitter case. Check the schematic: pin 12 is the audio line and is the pigtail connection. Pin 3 is the AGC line with the shield of the cable connected to pin 7.

There is no mistaking a shielded single conductor wire and it is in the multicondutor bundle. Pictures can be posted if needed.

Therefore: looking for 12 conductor cable to replace the PS line from AC-4 cabinet to transmitter CJ connector. 11 voltage lines, 1 shielded audio line.

--- In DrakeRadio@yahoogroups.com, Ethan Blanton wrote:
>
> k5fex spake unto us the following wisdom:
> > Anyone know a source for the multiconductor power cable? It is a 12
> > conductor cable with one of the 12 being a one wire shielded audio
> > cable. Need to replace cable on PS.
>
> If it makes your buy easier, the factory cable does not have the
> shielded audio cable inside the bundle. Instead, the cinch-jones
> connector has two cables coming out of it, one multiconductor and one
> short (maybe 4-6") shielded audio with an RCA female plug on it. The
> MS-4 and RV-4 both have a shielded audio cable with a male RCA that
> mates with it.
>
> Ethan
>

11467. For sale Drake 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 13:32:31 UTC
From: amfone20000
Topic: 11467 Message: 11467

Drake 2B , cabinet needs painting. White dial face very good. VFO dial has wrong knob and is bent but can be fixed, just straighten. Receives but only on 75/80 meters , no drift nor hum(caps changed-ed) but not interested in working on this. Actually I think it just needs an alignment and the right crystals, 40 is missing.

This is an easy fix really. $95.00,offer or trade from 48626.

73
Tim

11468. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 18:05:20 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 11468

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

11469. Re: For sale Drake 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 19:03:03 UTC
From: jnminni@att.net
Topic: 11467 Message: 11469

--- In DrakeRadio@yahoogroups.com, "amfone20000" wrote:
>
> Drake 2B , cabinet needs painting. White dial face very good. VFO dial has wrong knob and is bent but can be fixed, just straighten. Receives but only on 75/80 meters , no drift nor hum(caps changed-ed) but not interested in working on this. Actually I think it just needs an alignment and the right crystals, 40 is missing.
>
> This is an easy fix really. $95.00,offer or trade from 48626.
>
> 73
> Tim
>
I'm interested in this radio. How is the front panel? Also, I'm close enough to come and pick it up. (Near Lansing.)
-John Minnich

11470. Re: [DrakeRadio] Re: For sale Drake 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 21:45:21 UTC
From: amfone
Topic: 11467 Message: 11470

John

Sorry sold.

Tim
73

From: "jnminni@..." <jnminni@...>
To: DrakeRadio@yahoogroups.com
Sent: Monday, January 21, 2013 2:03 PM
Subject: [DrakeRadio] Re: For sale Drake 2B

--- In DrakeRadio@yahoogroups.com, "amfone20000" wrote:
>
> Drake 2B , cabinet needs painting. White dial face very good. VFO dial has wrong knob and is bent but can be fixed, just straighten. Receives but only on 75/80 meters , no drift nor hum(caps changed-ed) but not interested in working on this. Actually I think it just needs an alignment and the right crystals, 40 is missing.
>
> This is an easy fix really. $95.00,offer or trade from 48626.
>
> 73
> Tim
>
I'm interested in this radio. How is the front panel? Also, I'm close enough to come and pick it up. (Near Lansing.)
-John Minnich

[Non-text portions of this message have been removed]

11471. R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 23:26:07 UTC
From: qrper
Topic: 11471 Message: 11471

Gang...

I don't know why I keep doing it, but another Drake R4 ended up on my doorstep.

This one came in as dead, so it was no surprise when all I got out of it was a few clicks when I wiggled a tube or two in their sockets.

long story short, problem was actually caused by the factory. There is a 1K resistor connecting two sections of the metal filter cap together. From the factory, someone forgot to solder the one end. It was just crimped. The mechanical connection gave way, no B+ to the stages that need it. Broken radio.

Fixed that.

Problems that still lurk...

1. S-meter seems stingy. Yet, 50 mV moves the meter to S-9. I can easily hear a 1 uV signal.

2. There is a resistor that keeps going up in smoke. It's mounted onto a board right by the 6EV7 audio output tube. The schematic I have on the R4A shows it as a 150 ohm unit. The one that I took out looked like a 330 ohm, the last band is cooked to the point I can't read it. I uploaded a photo of the part.

3. calibrator signal is real weak. I've got plenty of output from the calibrator, 10 vpp, yet very little to the radio. Yes, I 've checked and replaced the small coupling capacitor but no joy. For all intents and purposes, the calibrator is working, but yet it's not.

Found a few tubes that were so-so and one with a high grid leakage. I stole a few tubes from another R4B, i saw no significant improvement.

So, any ideas?

Mike, wb8vge

11472. Re: [DrakeRadio] R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-21 23:37:51 UTC
From: Don Cunningham
Topic: 11471 Message: 11472

Mike,

Is that tube designator of 6EV7 a typo?? That tube was used in the Drake transmitters as the keying tube, not audio output. I'm likely wrong, but I've never seen that use for a 6EV7.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11473. Re: R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 00:42:11 UTC
From: qrper
Topic: 11471 Message: 11473

Typo

6eh5

Mike

--- In DrakeRadio@yahoogroups.com, "Don Cunningham" wrote:
>
> Mike,
>
> Is that tube designator of 6EV7 a typo?? That tube was used in the Drake transmitters as the keying tube, not audio output. I'm likely wrong, but I've never seen that use for a 6EV7.
> 73,
> Don, WB5HAK
>
> [Non-text portions of this message have been removed]
>

11474. Re: [DrakeRadio] Re: R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 01:02:16 UTC
From: Don Cunningham
Topic: 11471 Message: 11474

I suspected that it was a typo, but thought someone should ask. 6EH5 sounds more like it. I'll defer to Garey for possible problems.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11475. Re: [DrakeRadio] R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 03:22:01 UTC
From: Garey Barrell
Topic: 11471 Message: 11475

Mike -

Yes, that is R43, and should be a 330 ohm, 1/2W resistor. It is the decoupling resistor for the AF
OUTPUT stage. Depending upon which of the four versions of the R-4A that you have, it may or may
not have had C90D, the fourth section of the filter cap to ground on the downstream side. Obviously
a short here, or even just excess leakage could take out R43. Earlier versions didn't have that cap,
so would suspect the cathode bypass cap on the 6EH5 AF OUTPUT tube perhaps shorted, causing overcurrent.

Something drawing too much current, and R43 feeds only the AF OUTPUT stage through the output
transformer.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> Gang...
>
> I don't know why I keep doing it, but another Drake R4 ended up on my doorstep.
>
> This one came in as dead, so it was no surprise when all I got out of it was a few clicks when I wiggled a tube or two in their sockets.
>
> long story short, problem was actually caused by the factory. There is a 1K resistor connecting two sections of the metal filter cap together. From the factory, someone forgot to solder the one end. It was just crimped. The mechanical connection gave way, no B+ to the stages that need it. Broken radio.
>
> Fixed that.
>
> Problems that still lurk...
>
> 1. S-meter seems stingy. Yet, 50 mV moves the meter to S-9. I can easily hear a 1 uV signal.
>
> 2. There is a resistor that keeps going up in smoke. It's mounted onto a board right by the 6EV7 audio output tube. The schematic I have on the R4A shows it as a 150 ohm unit. The

one that I took out looked like a 330 ohm, the last band is cooked to the point I can't read it. I uploaded a photo of the part.
>
> 3. calibrator signal is real weak. I've got plenty of output from the calibrator, 10 vpp, yet very little to the radio. Yes, I 've checked and replaced the small coupling capacitor but no joy. For all intents and purposes, the calibrator is working, but yet it's not.
>
> Found a few tubes that were so-so and one with a high grid leakage. I stole a few tubes from another R4B, i saw no significant improvement.
>
> So, any ideas?
>
> Mike, wb8vge
>
>

11476. Re: R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 05:20:45 UTC
From: qrper
Topic: 11471 Message: 11476

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Mike -
>
> Yes, that is R43, and should be a 330 ohm, 1/2W resistor. It is the decoupling resistor for the AF
> OUTPUT stage. Depending upon which of the four versions of the R-4A that you have, it may or may
> not have had C90D, the fourth section of the filter cap to ground on the downstream side. Obviously
> a short here, or even just excess leakage could take out R43. Earlier versions didn't have that cap,
> so would suspect the cathode bypass cap on the 6EH5 AF OUTPUT tube perhaps shorted, causing overcurrent.
>
> Something drawing too much current, and R43 feeds only the AF OUTPUT stage through the output
> transformer.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> thanks Gary.

I'll change it. I Have the 11 tube version. Already replaced bypass capacitor and 100 ohm cathode resistor. The cathode resistor was cracked.

Mike wb8vge

11477. Re: [DrakeRadio] Re: R4A mystery resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 15:03:56 UTC
From: Garey Barrell
Topic: 11471 Message: 11477

Mike -

Hmmmm. Again, excess current through that stage.... Tube failure shorted, leaky coupling cap C174,
leaky C90D, all could present as destroyed R43.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
>
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Mike -
>>
>> Yes, that is R43, and should be a 330 ohm, 1/2W resistor. It is the decoupling resistor for the AF
>> OUTPUT stage. Depending upon which of the four versions of the R-4A that you have, it may or may
>> not have had C90D, the fourth section of the filter cap to ground on the downstream side. Obviously
>> a short here, or even just excess leakage could take out R43. Earlier versions didn't have that cap,
>> so would suspect the cathode bypass cap on the 6EH5 AF OUTPUT tube perhaps shorted, causing overcurrent.
>>
>> Something drawing too much current, and R43 feeds only the AF OUTPUT stage through the output
>> transformer.
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> thanks Gary.
> I'll change it. I Have the 11 tube version. Already replaced bypass capacitor and 100 ohm cathode resistor. The cathode resistor was cracked.

>
> Mike wb8vge
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

11478. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 17:26:26 UTC
From: Ethan Blanton
Topic: 11447 Message: 11478

k5fex spake unto us the following wisdom:
> Yes Ethan, there is a 4-6" audio cable coming OUT of the CJ connector.
> And, YES there is a shielded single conductor INSIDE the bundle. The
> single shielded line supplies the transmitter AGC line for connection
> to the L4 series of amplifiers (or any other amp). The pigtail of
> which you spoke simply feeds audio out of the transmitter case. Check
> the schematic: pin 12 is the audio line and is the pigtail connection.
> Pin 3 is the AGC line with the shield of the cable connected to pin 7.

My mistake; sorry. The only Drake PSU cable I've actually
disassembled was for an AC-3, which does not have the AGC line. I
didn't consider that it would not just be another pair.

Ethan

11479. RE: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 18:32:56 UTC
From: Wayne Smith
Topic: 11447 Message: 11479

Hey no problem. Sometimes the details get lost in translation.

Wayne

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Ethan Blanton
Sent: Tuesday, January 22, 2013 11:26 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

k5fex spake unto us the following wisdom:
> Yes Ethan, there is a 4-6" audio cable coming OUT of the CJ connector.
> And, YES there is a shielded single conductor INSIDE the bundle. The
> single shielded line supplies the transmitter AGC line for connection
> to the L4 series of amplifiers (or any other amp). The pigtail of
> which you spoke simply feeds audio out of the transmitter case. Check
> the schematic: pin 12 is the audio line and is the pigtail connection.
> Pin 3 is the AGC line with the shield of the cable connected to pin 7.

My mistake; sorry. The only Drake PSU cable I've actually
disassembled was for an AC-3, which does not have the AGC line. I
didn't consider that it would not just be another pair.

Ethan

[Non-text portions of this message have been removed]

11480. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 18:36:25 UTC
From: Robert Logan
Topic: 11447 Message: 11480

When you say 'the pigtail simply feeds audio out of the transmitter case', is that audio to monitor voice modulation as transmitted or receive audio for an external speaker? I always wondered what that short lead was for. Thanks, Bob, NZ5A

Sent from my iPhone

On Jan 22, 2013, at 11:26 AM, Ethan Blanton <ethan.blanton@...> wrote:

k5fex spake unto us the following wisdom:
> Yes Ethan, there is a 4-6" audio cable coming OUT of the CJ connector.
> And, YES there is a shielded single conductor INSIDE the bundle. The
> single shielded line supplies the transmitter AGC line for connection
> to the L4 series of amplifiers (or any other amp). The pigtail of
> which you spoke simply feeds audio out of the transmitter case. Check
> the schematic: pin 12 is the audio line and is the pigtail connection.
> Pin 3 is the AGC line with the shield of the cable connected to pin 7.

My mistake; sorry. The only Drake PSU cable I've actually
disassembled was for an AC-3, which does not have the AGC line. I
didn't consider that it would not just be another pair.

Ethan

[Non-text portions of this message have been removed]

11481. RE: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 18:56:54 UTC
From: Wayne Smith
Topic: 11447 Message: 11481

It is for speaker connection as far as I know.

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Robert Logan
Sent: Tuesday, January 22, 2013 12:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

When you say 'the pigtail simply feeds audio out of the transmitter case', is that audio to monitor voice modulation as transmitted or receive audio for an external speaker? I always wondered what that short lead was for. Thanks, Bob, NZ5A

Sent from my iPhone

On Jan 22, 2013, at 11:26 AM, Ethan Blanton ethan.blanton@...
<mailto:ethan.blanton%40att.net> > wrote:

k5fex spake unto us the following wisdom:
> Yes Ethan, there is a 4-6" audio cable coming OUT of the CJ connector.
> And, YES there is a shielded single conductor INSIDE the bundle. The
> single shielded line supplies the transmitter AGC line for connection
> to the L4 series of amplifiers (or any other amp). The pigtail of
> which you spoke simply feeds audio out of the transmitter case. Check
> the schematic: pin 12 is the audio line and is the pigtail connection.
> Pin 3 is the AGC line with the shield of the cable connected to pin 7.

My mistake; sorry. The only Drake PSU cable I've actually
disassembled was for an AC-3, which does not have the AGC line. I
didn't consider that it would not just be another pair.

Ethan

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11482. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 19:53:56 UTC
From: Richard Knoppow
Topic: 11447 Message: 11482

----- Original Message -----
From: "Robert Logan" <bob.logan47@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, January 22, 2013 10:36 AM
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

> When you say 'the pigtail simply feeds audio out of the
> transmitter case', is that audio to monitor voice
> modulation as transmitted or receive audio for an external
> speaker? I always wondered what that short lead was for.
> Thanks, Bob, NZ5A

The pigtail with female RCA jack on the transceiver end
is the speaker connector. I don't know why Drake did it
this way. When you use the rig with a speaker and power
supply the lead to the speaker can run along the PS cable.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11483. RE: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 20:05:10 UTC
From: Wayne Smith
Topic: 11447 Message: 11483

When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker

Wayne

K5FEx

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
Sent: Tuesday, January 22, 2013 1:54 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

----- Original Message -----
From: "Robert Logan" bob.logan47@... <mailto:bob.logan47%40yahoo.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Tuesday, January 22, 2013 10:36 AM
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
to TX

> When you say 'the pigtail simply feeds audio out of the
> transmitter case', is that audio to monitor voice
> modulation as transmitted or receive audio for an external
> speaker? I always wondered what that short lead was for.
> Thanks, Bob, NZ5A

The pigtail with female RCA jack on the transceiver end
is the speaker connector. I don't know why Drake did it
this way. When you use the rig with a speaker and power
supply the lead to the speaker can run along the PS cable.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

11484. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 21:57:45 UTC
From: Robert Logan
Topic: 11447 Message: 11484

Thank you, Wayne Always something to learn about these Drakes. Bob

Sent from my iPhone

On Jan 22, 2013, at 2:05 PM, "Wayne Smith" <oilieone@cox.net> wrote:

When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker

Wayne

K5FEx

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
Sent: Tuesday, January 22, 2013 1:54 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

----- Original Message -----
From: "Robert Logan" bob.logan47@... >
To: DrakeRadio@yahoogroups.com >
Sent: Tuesday, January 22, 2013 10:36 AM
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
to TX

> When you say 'the pigtail simply feeds audio out of the
> transmitter case', is that audio to monitor voice
> modulation as transmitted or receive audio for an external
> speaker? I always wondered what that short lead was for.
> Thanks, Bob, NZ5A

The pigtail with female RCA jack on the transceiver end
is the speaker connector. I don't know why Drake did it
this way. When you use the rig with a speaker and power
supply the lead to the speaker can run along the PS cable.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11485. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 21:59:11 UTC
From: Robert Logan
Topic: 11447 Message: 11485

Thank you, Richard. Good to know. Bob

Sent from my iPhone

On Jan 22, 2013, at 1:53 PM, "Richard Knoppow" <1oldlens1@...> wrote:

----- Original Message -----
From: "Robert Logan" bob.logan47@...>
To: DrakeRadio@yahoogroups.com>
Sent: Tuesday, January 22, 2013 10:36 AM
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
to TX

> When you say 'the pigtail simply feeds audio out of the
> transmitter case', is that audio to monitor voice
> modulation as transmitted or receive audio for an external
> speaker? I always wondered what that short lead was for.
> Thanks, Bob, NZ5A

The pigtail with female RCA jack on the transceiver end
is the speaker connector. I don't know why Drake did it
this way. When you use the rig with a speaker and power
supply the lead to the speaker can run along the PS cable.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...m.com

[Non-text portions of this message have been removed]

11486. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 22:55:47 UTC
From: Garey Barrell
Topic: 11447 Message: 11486

Bob -

There IS a reason for the speaker pig-tail out of the back of the power supply cable. The original
AC-3 and DC-were designed for use with the TR-3 _MOBILE_ transceiver. With this arrangement, there
was only theCinch plug and the antenna lead to deal with wheninstalling or removing the radio. When
the T-4X transmitter came out, the first ones were delivered with the AC-3. There was no speaker in
the T-4X, and there was also no linear amplifier keying lead. The companion R-4 receiver had it's
own speaker jack and the pig-tail was no longer needed. So many of us rewired the speaker pig-tail
to an external linear amplifier switch by moving one wire inside the Cinch connector.!

The later AC-4 added the linear control switch in the cable, and the pig-tail was retained for use
with the TR-4/C speaker.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Robert Logan wrote:
> Thank you, Wayne Always something to learn about these Drakes. Bob
>
> Sent from my iPhone
>
> On Jan 22, 2013, at 2:05 PM, "Wayne Smith" <oilieone@...> wrote:
>
> When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker
>
> Wayne
>
> K5FEx
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
> Sent: Tuesday, January 22, 2013 1:54 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

>
> ----- Original Message -----
> From: "Robert Logan" bob.logan47@... >
> To: DrakeRadio@yahoogroups.com >
> Sent: Tuesday, January 22, 2013 10:36 AM
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
> to TX
>
>> When you say 'the pigtail simply feeds audio out of the
>> transmitter case', is that audio to monitor voice
>> modulation as transmitted or receive audio for an external
>> speaker? I always wondered what that short lead was for.
>> Thanks, Bob, NZ5A
> The pigtail with female RCA jack on the transceiver end
> is the speaker connector. I don't know why Drake did it
> this way. When you use the rig with a speaker and power
> supply the lead to the speaker can run along the PS cable.
>
>

11487. RE: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-22 23:03:27 UTC
From: Wayne Smith
Topic: 11447 Message: 11487

Thanks Garey. I suspected that was the case. The TR-4C I have was acquired with its matching AC-4 and MS-4. The AC-4 has TWO pigtails. One was color coded to match the speaker cable. To my discredit… I've not checked into the second pigtail to determine its use.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Tuesday, January 22, 2013 4:56 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Bob -

There IS a reason for the speaker pig-tail out of the back of the power supply cable. The original
AC-3 and DC-were designed for use with the TR-3 _MOBILE_ transceiver. With this arrangement, there
was only theCinch plug and the antenna lead to deal with wheninstalling or removing the radio. When
the T-4X transmitter came out, the first ones were delivered with the AC-3. There was no speaker in
the T-4X, and there was also no linear amplifier keying lead. The companion R-4 receiver had it's
own speaker jack and the pig-tail was no longer needed. So many of us rewired the speaker pig-tail
to an external linear amplifier switch by moving one wire inside the Cinch connector.!

The later AC-4 added the linear control switch in the cable, and the pig-tail was retained for use
with the TR-4/C speaker.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Robert Logan wrote:
> Thank you, Wayne Always something to learn about these Drakes. Bob
>
> Sent from my iPhone
>
> On Jan 22, 2013, at 2:05 PM, "Wayne Smith" oilieone@cox.net <mailto:oilieone%40cox.net> > wrote:

>
> When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker
>
> Wayne
>
> K5FEx
>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On Behalf Of Richard Knoppow
> Sent: Tuesday, January 22, 2013 1:54 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX
>
> ----- Original Message -----
> From: "Robert Logan" bob.logan47@... <mailto:bob.logan47%40yahoo.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
> Sent: Tuesday, January 22, 2013 10:36 AM
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
> to TX
>
>> When you say 'the pigtail simply feeds audio out of the
>> transmitter case', is that audio to monitor voice
>> modulation as transmitted or receive audio for an external
>> speaker? I always wondered what that short lead was for.
>> Thanks, Bob, NZ5A
> The pigtail with female RCA jack on the transceiver end
> is the speaker connector. I don't know why Drake did it
> this way. When you use the rig with a speaker and power
> supply the lead to the speaker can run along the PS cable.
>
>

[Non-text portions of this message have been removed]

11488. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 01:51:07 UTC
From: Robert Logan
Topic: 11447 Message: 11488

Ah, thanks Gary. As soon as you said that a vague memory clicked in my mind. Long ago (well, 1962) one of the guys in my Novice class was the first to upgrade to General. He was able to acquire from T. Frank Smith (W5VA) a 32V2 and a 75A2 for AM phone and a Collins speaker. He later sold the RX and TX and bought a TR-3 and AC-3. Made T. Frank mad.

Anyway he was the first guy in the class to get on SSB and with a newfangled transceiver at that. We all went over to his shack to see it and him operate kit. I remember he hooked up a large speaker to that little phono plug, if I remember correctly, and only pressed the PTT on the mic to transmit. Amazing! We didn't understand logically why he didn't have to zero beat or throw a T-R switch or how something so 'small' could put out a 100 watts.

How far has equipment come in some senses, since my S-85 and DX-20 and Dow-Key relay. In other ways, Drake equipment principles are still vital in many modern rigs.

Thanks for the explanation.

Bob, NZ5A

Sent from my iPhone

On Jan 22, 2013, at 4:55 PM, Garey Barrell <k4oah@...> wrote:

Bob -

There IS a reason for the speaker pig-tail out of the back of the power supply cable. The original
AC-3 and DC-were designed for use with the TR-3 _MOBILE_ transceiver. With this arrangement, there
was only theCinch plug and the antenna lead to deal with wheninstalling or removing the radio. When
the T-4X transmitter came out, the first ones were delivered with the AC-3. There was no speaker in
the T-4X, and there was also no linear amplifier keying lead. The companion R-4 receiver had it's
own speaker jack and the pig-tail was no longer needed. So many of us rewired the speaker pig-tail
to an external linear amplifier switch by moving one wire inside the Cinch connector.!

The later AC-4 added the linear control switch in the cable, and the pig-tail was retained for use
with the TR-4/C speaker.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Robert Logan wrote:
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> Sent from my iPhone
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> On Jan 22, 2013, at 2:05 PM, "Wayne Smith" oilieone@...> wrote:
>
> When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker
>
> Wayne
>
> K5FEx
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
> Sent: Tuesday, January 22, 2013 1:54 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX
>
> ----- Original Message -----
> From: "Robert Logan" bob.logan47@... >
> To: DrakeRadio@yahoogroups.com >
> Sent: Tuesday, January 22, 2013 10:36 AM
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
> to TX
>
>> When you say 'the pigtail simply feeds audio out of the
>> transmitter case', is that audio to monitor voice
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>> Thanks, Bob, NZ5A
> The pigtail with female RCA jack on the transceiver end
> is the speaker connector. I don't know why Drake did it
> this way. When you use the rig with a speaker and power
> supply the lead to the speaker can run along the PS cable.
>
>

[Non-text portions of this message have been removed]

11489. Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 04:15:49 UTC
From: Garey Barrell
Topic: 11447 Message: 11489

Wayne -

That was the 'other' approach. Allowed use with either the TR-4 -OR- the T-4X (any). Your 'second'
one is almost certainly the linear switch.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Wayne Smith wrote:
> Thanks Garey. I suspected that was the case. The TR-4C I have was acquired with its matching AC-4 and MS-4. The AC-4 has TWO pigtails. One was color coded to match the speaker cable. To my discredit… I've not checked into the second pigtail to determine its use.
>
>
>
> Wayne
>
> K5FEX
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
> Sent: Tuesday, January 22, 2013 4:56 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX
>
>
>
>
>
> Bob -
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> There IS a reason for the speaker pig-tail out of the back of the power supply cable. The original
> AC-3 and DC-were designed for use with the TR-3 _MOBILE_ transceiver. With this arrangement, there
> was only theCinch plug and the antenna lead to deal with wheninstalling or removing the radio. When
> the T-4X transmitter came out, the first ones were delivered with the AC-3. There was no speaker in

> the T-4X, and there was also no linear amplifier keying lead. The companion R-4 receiver had it's
> own speaker jack and the pig-tail was no longer needed. So many of us rewired the speaker pig-tail
> to an external linear amplifier switch by moving one wire inside the Cinch connector.!
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> The later AC-4 added the linear control switch in the cable, and the pig-tail was retained for use
> with the TR-4/C speaker.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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>
>
> Robert Logan wrote:
>> Thank you, Wayne Always something to learn about these Drakes. Bob
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>> On Jan 22, 2013, at 2:05 PM, "Wayne Smith" oilieone@... <mailto:oilieone%40cox.net> > wrote:
>>
>> When using the AC-4 with a TR-4 series, the speaker connection is the pigtail (at least on my TR-4C) With the R-4 series, there is an audio out put for the speaker
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>> Wayne
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>> K5FEx
>>
>> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On Behalf Of Richard Knoppow
>> Sent: Tuesday, January 22, 2013 1:54 PM
>> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable to TX
>>
>> ----- Original Message -----
>> From: "Robert Logan" bob.logan47@... <mailto:bob.logan47%40yahoo.com> >
>> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
>> Sent: Tuesday, January 22, 2013 10:36 AM
>> Subject: Re: [DrakeRadio] Re: AC-4 PS multi conductor cable
>> to TX
>>
>>> When you say 'the pigtail simply feeds audio out of the
>>> transmitter case', is that audio to monitor voice
>>> modulation as transmitted or receive audio for an external
>>> speaker? I always wondered what that short lead was for.

>>> Thanks, Bob, NZ5A
>> The pigtail with female RCA jack on the transceiver end
>> is the speaker connector. I don't know why Drake did it
>> this way. When you use the rig with a speaker and power
>> supply the lead to the speaker can run along the PS cable.
>>
>>
>
>
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>
> [Non-text portions of this message have been removed]
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>
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> ------------------------------------
>
> Yahoo! Groups Links
>
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>

11490. TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 20:35:19 UTC
From: aa5wg
Topic: 11490 Message: 11490

Hi to all,

Can the TR7 run FSK RTTY? If so, is there any good documentation on how to set up the FSK RTTY operation?

I have a Rigblaster Plus from West Mountain Radio. Could this be used with the TR7 for FSK RTTY?

Thank you,

Chuck - AA5WG

11491. TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 20:50:14 UTC
From: aa5wg
Topic: 11490 Message: 11491

Is it possible to have both FSK RTTY and AFSK for other digital modes with the TR7?

Will the West Mountain Radio Rig Blaster Plus work with above two modes (FSK and AFSK)or is there a different or better way to skin this cat?

Thank you,

Chuck

11492. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 21:29:26 UTC
From: Garey Barrell
Topic: 11490 Message: 11492

Chuck -

I'm not aware of any provision for FSK with the TR-7. The C-Line was the last to provide that
function. It could probably be done, you want to switch the Carrier Oscillator 170 Hz with a DC
control voltage, but I would feel much better about an external AFSK generator. The IF switching
for the TR-7 has provisions for the 2125 / 2295 standard tones, and I believe the 2125/2975 tones
for 850 shift, but I don't know of anyone still using that!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

aa5wg wrote:
> Hi to all,
>
> Can the TR7 run FSK RTTY? If so, is there any good documentation on how to set up the FSK RTTY operation?
>
> I have a Rigblaster Plus from West Mountain Radio. Could this be used with the TR7 for FSK RTTY?
>
> Thank you,
>
> Chuck - AA5WG
>
>

11493. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 21:32:20 UTC
From: Garey Barrell
Topic: 11490 Message: 11493

Chuck -

If your Rig blaster supports AFSK, you are set for any modes it supports.

No provision for FSK.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

aa5wg wrote:
> Is it possible to have both FSK RTTY and AFSK for other digital modes with the TR7?
>
> Will the West Mountain Radio Rig Blaster Plus work with above two modes (FSK and AFSK)or is there a different or better way to skin this cat?
>
> Thank you,
>
> Chuck
>
>

11494. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 21:58:32 UTC
From: Don Cunningham
Topic: 11490 Message: 11494

Chuck,

Of course Garey is right about no provision for FSK. I am sure your Rigblaster can do AFSK with a sound card and the TR7 is capable of running 75W or so RTTY IF you have the accessory fan on the rig and power supply. Both will get pretty hot if you don't have the fans. The only problem is keeping the "current hams" from crying about a little drift!!! We didn't used to think anything of it, and were capable of following a guy up and down the band a bit, but not much anymore.

I ran a TR7 for lots of years of fun RTTY, but always FSK, I never tried to shift the PTO on it like we did the 4 lines.
73,
Don, WB5HAK (confessed RTTY nut)

[Non-text portions of this message have been removed]

11495. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 22:04:44 UTC
From: Don Cunningham
Topic: 11490 Message: 11495

Oops, poor proofreading again. Change FSK in that last paragraph to AFSK and it will make more sense. It's tough getting old!!!!!!!!!!
Don

[Non-text portions of this message have been removed]

11496. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 22:32:34 UTC
From: Chuck Pool
Topic: 11490 Message: 11496

Hi Garey,

I believe your are correct. 170 shift seems to be the standard.

Chuck

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 4:29 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Chuck -

I'm not aware of any provision for FSK with the TR-7. The C-Line was the last to provide that
function. It could probably be done, you want to switch the Carrier Oscillator 170 Hz with a DC
control voltage, but I would feel much better about an external AFSK generator. The IF switching
for the TR-7 has provisions for the 2125 / 2295 standard tones, and I believe the 2125/2975 tones
for 850 shift, but I don't know of anyone still using that!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

aa5wg wrote:
> Hi to all,
>
> Can the TR7 run FSK RTTY? If so, is there any good documentation on how to set up the FSK RTTY operation?
>
> I have a Rigblaster Plus from West Mountain Radio. Could this be used with the TR7 for FSK RTTY?
>
> Thank you,
>
> Chuck - AA5WG
>
>

[Non-text portions of this message have been removed]

11497. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 22:47:20 UTC
From: Chuck Pool
Topic: 11490 Message: 11497

Don,

I understand about the numbers, age.

I will have to check the Rig Blaster for AFSK capabilities with the TR7 and maybe a frequency stabilizer board.

One more thing. I took the main tuning knob off the TR7 and tuned the brass 1/4 inch shaft with my fingers.
I could feel bearings pinching (micro bumps) when rotating the shaft. Sometimes it felt like the shaft would hit something (Like hitting a stop) and then move on. It was a quick but noticeable resistance to turning the dial. Almost as soon as I felt this quick resistance, in rotating the PTO shaft, it would release and begin to rotate normally, hat is, rotate with micro bump feeling of the bearings.

Any way, I guess AFSK is it?

Chuck

From: Don Cunningham <donc@martineer.net>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 5:04 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Oops, poor proofreading again. Change FSK in that last paragraph to AFSK and it will make more sense. It's tough getting old!!!!!!!!!!
Don

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11498. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-23 23:00:56 UTC
From: Bob Macklin
Topic: 11490 Message: 11498

Old TUs for use with mechanical teleprinters used the 850 Hz shift. In those day AFSK was used on VHF/UHF.

In that case the tone were 2125/2975. The current RTTY software can handle this shift.

I have a recent 2M FM transceiver that is setup for these tones for Packet.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"

----- Original Message -----
From: Chuck Pool
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 2:47 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Don,

I understand about the numbers, age.

I will have to check the Rig Blaster for AFSK capabilities with the TR7 and maybe a frequency stabilizer board.

One more thing. I took the main tuning knob off the TR7 and tuned the brass 1/4 inch shaft with my fingers.
I could feel bearings pinching (micro bumps) when rotating the shaft. Sometimes it felt like the shaft would hit something (Like hitting a stop) and then move on. It was a quick but noticeable resistance to turning the dial. Almost as soon as I felt this quick resistance, in rotating the PTO shaft, it would release and begin to rotate normally, hat is, rotate with micro bump feeling of the bearings.

Any way, I guess AFSK is it?

Chuck

_____
From: Don Cunningham donc@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 5:04 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Oops, poor proofreading again. Change FSK in that last paragraph to AFSK and it will make more sense. It's tough getting old!!!!!!!!!!
Don

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[Non-text portions of this message have been removed]

11499. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 00:11:59 UTC
From: Chuck Pool
Topic: 11490 Message: 11499

Bob,
Thank you.
Chuck

From: Bob Macklin <macklinbob@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 6:00 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Old TUs for use with mechanical teleprinters used the 850 Hz shift. In those day AFSK was used on VHF/UHF.

In that case the tone were 2125/2975. The current RTTY software can handle this shift.

I have a recent 2M FM transceiver that is setup for these tones for Packet.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"

----- Original Message -----
From: Chuck Pool
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 2:47 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Don,

I understand about the numbers, age.

I will have to check the Rig Blaster for AFSK capabilities with the TR7 and maybe a frequency stabilizer board.

One more thing. I took the main tuning knob off the TR7 and tuned the brass 1/4 inch shaft with my fingers.
I could feel bearings pinching (micro bumps) when rotating the shaft. Sometimes it felt like the shaft would hit something (Like hitting a stop) and then move on. It was a quick but noticeable resistance to turning the dial. Almost as soon as I felt this quick resistance, in rotating the PTO shaft, it would release and begin to rotate normally, hat is, rotate with micro bump feeling of the bearings.

Any way, I guess AFSK is it?

Chuck

_____
From: Don Cunningham donc@martineer.net>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 5:04 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Oops, poor proofreading again. Change FSK in that last paragraph to AFSK and it will make more sense. It's tough getting old!!!!!!!!!!
Don

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11500. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 01:30:57 UTC
From: Don Cunningham
Topic: 11490 Message: 11500

Chuck,

It is all 170 cycle shift on HF RTTY now. Many of the older rigs couldn't pass 2975 through the SSB filters, so those hams went to "low tones" if they stayed 850 cycle, most just went to 170 cycle shift and it became the norm. You can't tell the difference listening or tuning them in UNLESS you try to meet on a certain frequency and each dial will read different with the low and high tones. I am old fashioned and still use dedicated HAL Communications terminal units. I am also a curmudgeon that likes to ragchew on RTTY, no "Hi/Bye" QSO's or buffer downloaders. I want to get to know folks, not just work "X" numbers each day. To each his own.

The problem you describe on the tuning shaft would lead me to believe that you have hardening grease in the bearings binding up. WB4HFN's site shows how to rebuild the PTO and may give you some clues in the pictures.
73, and enjoy the TR7,
Don, WB5HAK

[Non-text portions of this message have been removed]

11501. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 02:43:07 UTC
From: Chuck Pool
Topic: 11490 Message: 11501

Hi Don,

It sounds like we have the same interest in RTTY, rag chew. I have not tried this mode and thought it is about
time to do so.

Thanks for the PTO tip.

Chuck - AA5WG

From: Don Cunningham <donc@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 8:30 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Chuck,

It is all 170 cycle shift on HF RTTY now. Many of the older rigs couldn't pass 2975 through the SSB filters, so those hams went to "low tones" if they stayed 850 cycle, most just went to 170 cycle shift and it became the norm. You can't tell the difference listening or tuning them in UNLESS you try to meet on a certain frequency and each dial will read different with the low and high tones. I am old fashioned and still use dedicated HAL Communications terminal units. I am also a curmudgeon that likes to ragchew on RTTY, no "Hi/Bye" QSO's or buffer downloaders. I want to get to know folks, not just work "X" numbers each day. To each his own.

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Don, WB5HAK

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11502. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 03:18:11 UTC
From: Bob Macklin
Topic: 11490 Message: 11502

Back in the DARK AGES (60's &70's) we had RTTY most evenings on 2M AM (no repeater) in Silicon Valley. We only had a small group but we had a good time.

I had a Model 15 at that time.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Chuck Pool
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 6:43 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Hi Don,

It sounds like we have the same interest in RTTY, rag chew. I have not tried this mode and thought it is about
time to do so.

Thanks for the PTO tip.

Chuck - AA5WG

_____
From: Don Cunningham donc@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 8:30 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Chuck,

It is all 170 cycle shift on HF RTTY now. Many of the older rigs couldn't pass 2975 through the SSB filters, so those hams went to "low tones" if they stayed 850 cycle, most just went to 170 cycle shift and it became the norm. You can't tell the difference listening or tuning them in UNLESS you try to meet on a certain frequency and each dial will read different with the low and high tones. I am old fashioned and still use dedicated HAL Communications terminal units. I am also a curmudgeon that likes to ragchew on RTTY, no "Hi/Bye" QSO's or buffer downloaders. I want to get to know folks, not just work "X" numbers each day. To each his own.

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73, and enjoy the TR7,
Don, WB5HAK

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11503. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 03:25:09 UTC
From: Don Cunningham
Topic: 11490 Message: 11503

Same here, Bob, but we actually used old police radios converted to 2m FM on a fixed frequency (146.70) and had five or six in our group, spread out over the Southern part of Oklahoma. Loads of fun, and as you said, we met daily. Passed a LOT of RTTY art with the machines, then just rag chewed. Carried that on into the 80's with computers and screens, but of course the RTTY art was history.

I still meet a small group of old timers on 20M several days a week. Getting fewer and further between meeting new ones but there are a few.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11504. Re: [DrakeRadio] TR7 FSK RTTY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 03:36:14 UTC
From: Bob Macklin
Topic: 11490 Message: 11504

I do remember some of the RTTY art!

"""""""
} O O {
"
(------)

Stuff you cannot do with a GLASS TELETYPE!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Don Cunningham
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 23, 2013 7:25 PM
Subject: Re: [DrakeRadio] TR7 FSK RTTY

Same here, Bob, but we actually used old police radios converted to 2m FM on a fixed frequency (146.70) and had five or six in our group, spread out over the Southern part of Oklahoma. Loads of fun, and as you said, we met daily. Passed a LOT of RTTY art with the machines, then just rag chewed. Carried that on into the 80's with computers and screens, but of course the RTTY art was history.

I still meet a small group of old timers on 20M several days a week. Getting fewer and further between meeting new ones but there are a few.
73,
Don, WB5HAK

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[Non-text portions of this message have been removed]

11505. Ac-4R install help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 18:00:33 UTC
From: Ernie Gray
Topic: 11505 Message: 11505

Greetings,

I am finishing up installing the mod to my AC-4 with Bryce's kit and I am at the part that has me soldering a black with from PCB "earth" to ground terminal on the 3 lug original strip.

There is an unsoldered small black wire already at that location, and no mention of it in the docs.

I ASSUME I solder both wires to ground, but I want to be sure. And I know there is a wealth of knowledge on this site. The AC-4 is for a pristine TR-4C I hole to have cooking today.

TNX & 73's

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

[Non-text portions of this message have been removed]

11506. Re: [DrakeRadio] Ac-4R install help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 18:19:50 UTC
From: Mike
Topic: 11505 Message: 11506

Ernie

Is the un soldered wire there or did you wire it to the strip

Mike wb8vge

Sent from my iPhone

On Jan 24, 2013, at 1:00 PM, Ernie Gray <w1mrq@...> wrote:

> Greetings,
>
> I am finishing up installing the mod to my AC-4 with Bryce's kit and I am at the part that has me soldering a black with from PCB "earth" to ground terminal on the 3 lug original strip.
>
> There is an unsoldered small black wire already at that location, and no mention of it in the docs.
>
> I ASSUME I solder both wires to ground, but I want to be sure. And I know there is a wealth of knowledge on this site. The AC-4 is for a pristine TR-4C I hole to have cooking today.
>
> TNX & 73's
>
> Ernie Gray
> W1MRQ
> PO Box 548
> Weare, NH, 03281
> 603-770-7408
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11507. Re: [DrakeRadio] Ac-4R install help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-24 18:41:03 UTC
From: Ernie Gray
Topic: 11505 Message: 11507

Sorry guys, it was a grey wire which went to the wiper of the bias pot, nnot a lost black wire.

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Ernie Gray <w1mrq@yahoo.com>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Thursday, January 24, 2013 1:00 PM
Subject: [DrakeRadio] Ac-4R install help

Greetings,

I am finishing up installing the mod to my AC-4 with Bryce's kit and I am at the part that has me soldering a black with from PCB "earth" to ground terminal on the 3 lug original strip.

There is an unsoldered small black wire already at that location, and no mention of it in the docs.

I ASSUME I solder both wires to ground, but I want to be sure. And I know there is a wealth of knowledge on this site. The AC-4 is for a pristine TR-4C I hole to have cooking today.

TNX & 73's

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11508. DX Engineering Speech Processor for Drake

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 04:16:13 UTC
From: k9sqg
Topic: 11508 Message: 11508

For Sale:

DX Engineering speech processor, LC-2-T4X for Drake, with instructions. $100.

Shipping and insurance are extra, continental US only. Thanks for reading the ad.

73,

Evan, K9SQG@...

11509. Looking for a TR4-C Part

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 04:28:20 UTC
From: Pete N6QW
Topic: 11509 Message: 11509

Any one have an extra TR4-C top cage cover that fits over the 6JB6's that they would like to trade for cash?

Pete N6QW

11510. Re: [DrakeRadio] TR4 cage cover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 13:16:41 UTC
From: Chgypsy@...
Topic: 11510 Message: 11510

jessystems@... writes:

Any one have an extra TR4-C top cage cover Pete N6QW
Hi Pete,
Sorry I do not have an extra cover (do have a cage). But in any case are you aware that it may never have had a cover. This subject has been covered in quite a few archives. Carl wd8nhk

[Non-text portions of this message have been removed]

11511. Re: [DrakeRadio] TR4 cage cover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 15:48:42 UTC
From: Garey Barrell
Topic: 11510 Message: 11511

Carl -

Only the TR-3 had NO cover, just a black square. The TR-4 had a one-piece, black box with a top.
Late TR-4s had an alodine (silver/gold) cover with a removable top held by two screws. ALL TR-4Cs
had the alodine box with removabletop.

Likewise, the T-4X had the black, one-piece box with top. The T-4XB and C had the alodine cover
with removable top.

The T-4 had black one-piece, the T-4B had alodine with removable top.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chgypsy@... wrote:
>
> jessystems@... writes:
>
> Any one have an extra TR4-C top cage cover Pete N6QW
> Hi Pete,
> Sorry I do not have an extra cover (do have a cage). But in any case are
> you aware that it may never have had a cover. This subject has been
> covered in quite a few archives. Carl wd8nhk
>
>

11512. Re: [DrakeRadio] TR5/ 7 vs MFJ 1275 T

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 16:26:13 UTC
From: Chgypsy@...
Topic: 11512 Message: 11512

Hello to the group,

Maybe this will help someone else.

I have an MFJ 1275 T (4 pin mic connector) that I purchased to use with my Drake TR5 on PSK 31.

Should you purchase one be prepared to rewire the MFJ box (internal) both the cable to your tncvr as well as your mic input connector on the box.

The instruction sheet that MFJ has for the unit .....SHOULD BUT DOES NOT .....say that the units mic connector and output cable will be wired for something. In my case a Kenwood 4 pin mic.. Reference pg 5 of their instructions they show that particular unit.

Its only logical I guess, they have to wire for something. I have called them and it would be real nice if the tech (" Drake; Can't help") would tell you that perhaps they don't know, but.....all the instructions talk about are the internal jumpers.

BTW it works fine. Carl wd8nhk

[Non-text portions of this message have been removed]

11513. Re: [DrakeRadio] Looking for a TR4-C Part

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 18:06:32 UTC
From: g4jss@tiscali.co.uk
Topic: 11509 Message: 11513

Hello Peter

Yes, I have one from a T-4XC. Is your QRZ.com address still good?

Cheers

Vic
G4JSS

11514. Re: [DrakeRadio] Looking for a TR4-C Part

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 19:10:50 UTC
From: Garey Barrell
Topic: 11509 Message: 11514

Vic -

Won't fit, he has a TR-4C (three PA tubes).

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

g4jss@... wrote:
> Hello Peter
>
> Yes, I have one from a T-4XC. Is your QRZ.com address still good?
>
> Cheers
>
> Vic
> G4JSS
>
>

11515. Re: [DrakeRadio] Looking for a TR4-C Part

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-25 20:13:13 UTC
From: g4jss@tiscali.co.uk
Topic: 11509 Message: 11515

Hi Garey
Yes just been told about that. I mis-read the request and thought he meant a cage cover for the T-4.

Thanks.

73

Vic

11516. eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 15:54:19 UTC
From: Darrell Bellerive
Topic: 11516 Message: 11516

I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by the price these fetched. Perhaps I should part out all my Drake gear and retire. :-)

For those interested here are the completed eBay listings:
Item number: 181068360432
Item number: 170979653196

73, Darrell VA7TO

--
Darrell Bellerive

11517. Re: [DrakeRadio] eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 16:07:45 UTC
From: Garey Barrell
Topic: 11516 Message: 11517

Darrell -

This is why you see people scrapping perfectly good radios!! Works just like cars, $20k car has
$40k of parts, bought individually.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Darrell Bellerive wrote:
> I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> the price these fetched. Perhaps I should part out all my Drake gear and
> retire. :-)
>
> For those interested here are the completed eBay listings:
> Item number: 181068360432
> Item number: 170979653196
>
> 73, Darrell VA7TO
>
>

11518. RE: [DrakeRadio] eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 17:08:37 UTC
From: Ian Reeve
Topic: 11516 Message: 11518

Unfortunately this is very much the case now, it applies across the board to a lot of amateur radio kit and to vintage valve receivers and equipment.
You only have to do a search for FT101, FRG7, FR101 in Yaesu to see the value put on individual parts of these grand old receivers/transceivers.
The Drake are good solid equipment, I own a R4-c which performs very well but is worh more parted out. Sad but as times get hard, it is increasingly the way to get a few ? or $ in the back pocket.
I have in the past bought non working equipment for just the few parts I required and parted out and sold on the rest. Always came out in profit!
But I would not part out my Drake!

73

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: k4oah@...
Date: Sat, 26 Jan 2013 11:07:45 -0500
Subject: Re: [DrakeRadio] eBay Prices!

Darrell -

This is why you see people scrapping perfectly good radios!! Works just like cars, $20k car has

$40k of parts, bought individually.

73, Garey - K4OAH

Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

and TR-4/C Service Supplement CDs

Darrell Bellerive wrote:

> I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by

> the price these fetched. Perhaps I should part out all my Drake gear and

> retire. :-)

>

> For those interested here are the completed eBay listings:

> Item number: 181068360432

> Item number: 170979653196

>

> 73, Darrell VA7TO

>

>

[Non-text portions of this message have been removed]

11519. R4C Cascode Triode RF Amp

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 21:06:38 UTC
From: aa5wg
Topic: 11519 Message: 11519

Hi to all,

Has anyone built a triode cascode RF amp for the R4C?

I was thinking two triodes in one glass/metal envelope.

Would this be hard to do?

Chuck

11520. Re: [DrakeRadio] eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 21:46:42 UTC
From: Mike
Topic: 11516 Message: 11520

Actually

I'am glad that propel do that.

Without someone parting out radios, I could not keep the ones I have going.

Hurts? You betcha!

Sometimes the good of the many out weighs the need of the one.

Mike wb8vge

Sent from my iPhone

On Jan 26, 2013, at 11:07 AM, Garey Barrell <k4oah@mindspring.com> wrote:

> Darrell -
>
> This is why you see people scrapping perfectly good radios!! Works just like cars, $20k car has
> $40k of parts, bought individually.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Darrell Bellerive wrote:
> > I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> > the price these fetched. Perhaps I should part out all my Drake gear and
> > retire. :-)
> >
> > For those interested here are the completed eBay listings:
> > Item number: 181068360432
> > Item number: 170979653196
> >
> > 73, Darrell VA7TO
> >
> >
>
>

[Non-text portions of this message have been removed]

11521. Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 23:57:25 UTC
From: qrper
Topic: 11516 Message: 11521

needless to say, that's suppose to be people and not propel...

mike

--- In DrakeRadio@yahoogroups.com, Mike wrote:
>
> Actually
>
> I'am glad that propel do that.
>
> Without someone parting out radios, I could not keep the ones I have going.
>
> Hurts? You betcha!
>
> Sometimes the good of the many out weighs the need of the one.
>
> Mike wb8vge
>
> Sent from my iPhone
>
> On Jan 26, 2013, at 11:07 AM, Garey Barrell wrote:
>
> > Darrell -
> >
> > This is why you see people scrapping perfectly good radios!! Works just like cars, $20k car has
> > $40k of parts, bought individually.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> >
> >
> > Darrell Bellerive wrote:
> > > I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> > > the price these fetched. Perhaps I should part out all my Drake gear and
> > > retire. :-)
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> > > For those interested here are the completed eBay listings:
> > > Item number: 181068360432
> > > Item number: 170979653196
> > >
> > > 73, Darrell VA7TO

> > >
> > >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

11522. looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-26 23:58:27 UTC
From: qrper
Topic: 11522 Message: 11522

subject lines says it all.

No extra holes, mods or other such things

all the right knobs, etc....

mike, wb8vge

11523. Fwd: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 00:11:28 UTC
From: Dan Galligan
Topic: 11523 Message: 11523

> What's a QRP'er want with QRO equipment?
> Sorry, my sarcastic mind couldn't help but ask.
> I DO know of an Alpha 76A for sale, but not an L4B. Wish I could help, but all I can offer, is sarcastic jocularity.
>
> Dan
> W3RXO/W6
> DM14cb
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

11524. Re: Fwd: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 01:35:24 UTC
From: qrper
Topic: 11523 Message: 11524

Matches the existing equipment... Just completing the collection

Mike wb8vge

--- In DrakeRadio@yahoogroups.com, Dan Galligan wrote:
>
> > What's a QRP'er want with QRO equipment?
> > Sorry, my sarcastic mind couldn't help but ask.
> > I DO know of an Alpha 76A for sale, but not an L4B. Wish I could help, but all I can offer, is sarcastic jocularity.
> >
> > Dan
> > W3RXO/W6
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> >
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> >
> > Sent from my somewhat brighter, larger, electronic leash.
>
>
> [Non-text portions of this message have been removed]
>

11525. Re: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 01:40:30 UTC
From: Dan Galligan
Topic: 11523 Message: 11525

Oh, I was just being a smart alek. My humor tends to run on the sarcastic side.
I should know that was what you were looking to do, as I've seen plenty of your posts. I just HAD to ask though. My sarcastic side was just screaming at me, to inject a little levity.
I really didn't mean to be a pest, my bad humor is not always well received.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Jan 26, 2013, at 5:35 PM, qrper <prosolar@...> wrote:

> Matches the existing equipment... Just completing the collection
>
> Mike wb8vge
>
> --- In DrakeRadio@yahoogroups.com, Dan Galligan wrote:
>>
>>> What's a QRP'er want with QRO equipment?
>>> Sorry, my sarcastic mind couldn't help but ask.
>>> I DO know of an Alpha 76A for sale, but not an L4B. Wish I could help, but all I can offer, is sarcastic jocularity.
>>>
>>> Dan
>>> W3RXO/W6
>>> DM14cb
>>>
>>> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>>>
>>> Sent from my somewhat brighter, larger, electronic leash.
>>
>>
>> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

11526. Re: looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 01:48:45 UTC
From: qrper
Topic: 11523 Message: 11526

Oh no I thought was kind of funny myself

Mike wb8vge

--- In DrakeRadio@yahoogroups.com, Dan Galligan wrote:
>
> Oh, I was just being a smart alek. My humor tends to run on the sarcastic side.
> I should know that was what you were looking to do, as I've seen plenty of your posts. I just HAD to ask though. My sarcastic side was just screaming at me, to inject a little levity.
> I really didn't mean to be a pest, my bad humor is not always well received.
>
> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Jan 26, 2013, at 5:35 PM, qrper wrote:
>
> > Matches the existing equipment... Just completing the collection
> >
> > Mike wb8vge
> >
> > --- In DrakeRadio@yahoogroups.com, Dan Galligan wrote:
> >>
> >>> What's a QRP'er want with QRO equipment?
> >>> Sorry, my sarcastic mind couldn't help but ask.
> >>> I DO know of an Alpha 76A for sale, but not an L4B. Wish I could help, but all I can offer, is sarcastic jocularity.
> >>>
> >>> Dan
> >>> W3RXO/W6
> >>> DM14cb
> >>>
> >>> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
> >>>
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> >>
> >>
> >> [Non-text portions of this message have been removed]
> >
> >

> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
>
>
> [Non-text portions of this message have been removed]
>

11527. Re: Fwd: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 02:20:44 UTC
From: Roger Gagos
Topic: 11523 Message: 11527

Hope you find one. I just had a nice L-4B plus MN-2000 follow me home from HRO San Diego last weekend and am totally thrilled with them. Looks good next to the "B-Line" too!

Anyone looking for an AL-811H or LDG-1000ProII Autotuner? My antennas are resonant designs so I don't know why I bought that tuner, as nice as it is.

73,

Roger, K6EQ

On Sat, Jan 26, 2013 at 5:35 PM, qrper <prosolar@...> wrote:

> **
>
>
> Matches the existing equipment... Just completing the collection
>
> Mike wb8vge
>
> --- In DrakeRadio@yahoogroups.com, Dan Galligan wrote:
> >
> > > What's a QRP'er want with QRO equipment?
> > > Sorry, my sarcastic mind couldn't help but ask.
> > > I DO know of an Alpha 76A for sale, but not an L4B. Wish I could help,
> but all I can offer, is sarcastic jocularity.
> > >
> > > Dan
> > > W3RXO/W6
> > > DM14cb
> > >
> > > That government is best, which governs the least, because its people
> discipline themselves. Thomas Jefferson
> > >
> > > Sent from my somewhat brighter, larger, electronic leash.
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>

[Non-text portions of this message have been removed]

11528. Re: Fwd: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 02:24:08 UTC
From: Joe
Topic: 11523 Message: 11528

What is a clean L-4B with rebuilt power supply worth these days? And Dan, "Whatever I can get" is not an acceptable answer! <<GRIN>>

Joe - WA6RKN

----- Original Message -----
From: "Roger Gagos" <k6eq@...>
Subject: Re: Fwd: [DrakeRadio] looking for a L4B

> Hope you find one. I just had a nice L-4B plus MN-2000 follow me home
> from
> HRO San Diego last weekend and am totally thrilled with them. Looks good
> next to the "B-Line" too!

11529. Re: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 03:25:59 UTC
From: Dan Galligan
Topic: 11523 Message: 11529

Joe,
All joking aside. November of 2010, I bought one, at a swap meet. The fellow selling it was selling for another ham, who had to move into a assisted care facility, due to advanced Alzheimer's. It was in near mint condition, physically, externally, and they were asking $750. The chassis was bright, and not corroded, at all.
Due to the circumstances, I wanted to pay full price, because of where the money was going. But, I only had $704 on my person. The sellers were packing up to leave, and didn't want to wait, for me to sell a couple of more items, so they took the $704. I got home and checked it out, and all was good. No issues, whatsoever. I thought at that time that $750 was a very fair price, for one in such nice shape. I would think that with the devaluation of the dollar, to a buyer who can afford it, one with no issues, in good physical shape ought to fetch between $800-$900, maybe a bit more.
Oh, and did I mention, that mine came with 2 spare NOS Eimac 3-500Z's, in unopened boxes? I actually felt bad, for getting it so cheap. But, the fellows who were selling it, didn't think the extra hour, it might take me to sell more stuff, was worth the wait, for $46, more. They had to get on the road back to the central coast of California.
The only negative on the amp, was the owner's call sign, was engraved on the bottom of the power supply, and on the inner chassis, on the RF deck. But, luckily, done professionally, not a hack job. He obviously took good care of it.
I can't wait to complete my move, and get it set up in my new shack, with my B and C Twins.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Jan 26, 2013, at 6:24 PM, Joe <WA6RKN@...> wrote:

> What is a clean L-4B with rebuilt power supply worth these days? And Dan,
> "Whatever I can get" is not an acceptable answer! <<GRIN>>
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Roger Gagos" <k6eq@...>
> Subject: Re: Fwd: [DrakeRadio] looking for a L4B
>
>
>> Hope you find one. I just had a nice L-4B plus MN-2000 follow me home
>> from
>> HRO San Diego last weekend and am totally thrilled with them. Looks good
>> next to the "B-Line" too!
>
>

>
> ------------------------------------
>
> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

11530. Re: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 06:58:24 UTC
From: vacuuminded2@...
Topic: 11523 Message: 11530

One just sold up here in IL at a hamfest for $500. Rebuilt supply, but the cabinets were painted a glossier black. I think his initial asking price was more around 750.

YMMV
Chris

Sent from my outdated iPhone wireless thingy

On Jan 26, 2013, at 8:24 PM, Joe <WA6RKN@...> wrote:

> What is a clean L-4B with rebuilt power supply worth these days? And Dan,
> "Whatever I can get" is not an acceptable answer! < >
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Roger Gagos" k6eq@...>
> Subject: Re: Fwd: [DrakeRadio] looking for a L4B
>
> > Hope you find one. I just had a nice L-4B plus MN-2000 follow me home
> > from
> > HRO San Diego last weekend and am totally thrilled with them. Looks good
> > next to the "B-Line" too!
>
>

[Non-text portions of this message have been removed]

11531. Re: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 12:27:33 UTC
From: Kris Merschrod
Topic: 11523 Message: 11531

Dan,

Thank you for the latest from the market place for a L4-B. the "extra" 3-500s were a valuable "toss in." That was a feal and a half!

See that, Mike? (I wish that I had an extra pair of 3-50Zs to sweeten the deal :>)

Kris KM2KM
----- Original Message -----
From: Dan Galligan
To: DrakeRadio@yahoogroups.com
Sent: Saturday, January 26, 2013 10:25 PM
Subject: Re: [DrakeRadio] looking for a L4B

Joe,
All joking aside. November of 2010, I bought one, at a swap meet. The fellow selling it was selling for another ham, who had to move into a assisted care facility, due to advanced Alzheimer's. It was in near mint condition, physically, externally, and they were asking $750. The chassis was bright, and not corroded, at all.
Due to the circumstances, I wanted to pay full price, because of where the money was going. But, I only had $704 on my person. The sellers were packing up to leave, and didn't want to wait, for me to sell a couple of more items, so they took the $704. I got home and checked it out, and all was good. No issues, whatsoever. I thought at that time that $750 was a very fair price, for one in such nice shape. I would think that with the devaluation of the dollar, to a buyer who can afford it, one with no issues, in good physical shape ought to fetch between $800-$900, maybe a bit more.
Oh, and did I mention, that mine came with 2 spare NOS Eimac 3-500Z's, in unopened boxes? I actually felt bad, for getting it so cheap. But, the fellows who were selling it, didn't think the extra hour, it might take me to sell more stuff, was worth the wait, for $46, more. They had to get on the road back to the central coast of California.
The only negative on the amp, was the owner's call sign, was engraved on the bottom of the power supply, and on the inner chassis, on the RF deck. But, luckily, done professionally, not a hack job. He obviously took good care of it.
I can't wait to complete my move, and get it set up in my new shack, with my B and C Twins.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Jan 26, 2013, at 6:24 PM, Joe WA6RKN@...> wrote:

> What is a clean L-4B with rebuilt power supply worth these days? And Dan,
> "Whatever I can get" is not an acceptable answer! < >
>

> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Roger Gagos" k6eq@...>
> Subject: Re: Fwd: [DrakeRadio] looking for a L4B
>
>
>> Hope you find one. I just had a nice L-4B plus MN-2000 follow me home
>> from
>> HRO San Diego last weekend and am totally thrilled with them. Looks good
>> next to the "B-Line" too!
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11532. Re: [DrakeRadio] looking for a L4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 15:09:02 UTC
From: Steve Wedge
Topic: 11523 Message: 11532

I had a chance at one at the fest in Deerfield, NH, from a friend, for $650 but I was out of dough. I did buy his B-Twins for a similarly attractive price and the transmitter is now part of my station. I couldn't believe it was in even better shape than the one I had.

Yeah - $650 was a steal and my friend knew it - he just wanted to clear out his shack so that only his contest station was there. I think he's running multi-two these days

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Saturday, January 26, 2013 10:25 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] looking for a L4B

Joe,
All joking aside. November of 2010, I bought one, at a swap meet. The fellow selling it was selling for another ham, who had to move into a assisted care facility, due to advanced Alzheimer's. It was in near mint condition, physically, externally, and they were asking $750. The chassis was bright, and not corroded, at all.
Due to the circumstances, I wanted to pay full price, because of where the money was going. But, I only had $704 on my person. The sellers were packing up to leave, and didn't want to wait, for me to sell a couple of more items, so they took the $704. I got home and checked it out, and all was good. No issues, whatsoever. I thought at that time that $750 was a very fair price, for one in such nice shape. I would think that with the devaluation of the dollar, to a buyer who can afford it, one with no issues, in good physical shape ought to fetch between $800-$900, maybe a bit more.
Oh, and did I mention, that mine came with 2 spare NOS Eimac 3-500Z's, in unopened boxes? I actually felt bad, for getting it so cheap. But, the fellows who were selling it, didn't think the extra hour, it might take me to sell more stuff, was worth the wait, for $46, more. They had to get on the road back to the central coast of California.
The only negative on the amp, was the owner's call sign, was engraved on the bottom of the power supply, and on the inner chassis, on the RF deck. But, luckily, done professionally, not a hack job. He obviously took good care of it.
I can't wait to complete my move, and get it set up in my new shack, with my B and C Twins.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Jan 26, 2013, at 6:24 PM, Joe WA6RKN@...> wrote:

> What is a clean L-4B with rebuilt power supply worth these days? And Dan,
> "Whatever I can get" is not an acceptable answer! < >
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Roger Gagos" k6eq@...>
> Subject: Re: Fwd: [DrakeRadio] looking for a L4B
>
>
>> Hope you find one. I just had a nice L-4B plus MN-2000 follow me home
>> from
>> HRO San Diego last weekend and am totally thrilled with them. Looks good
>> next to the "B-Line" too!
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11533. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 15:39:48 UTC
From: JD Reich
Topic: 10991 Message: 11533

Morning Garey,

I received the CD and it is such a great assortment of documentation and pictures, all of which have been very helpful.

Back to the TR-4 I am working on, I again tested across r140 with power off and got 11.9 ohms. With power on I get 152.5 voltage to ground at the top of r140 and 46.4 at the bottom, with the red wire.

I also am getting 46.4 volts at the PTO and Q4, so I assume those might be bad, however before replacing those, why am I not getting a current drop after r140? It seems to test within the spec of 12k, but doesn't seem to be dropping the 152.5 volts down?

thanks
JD

On Sat, Jan 19, 2013 at 5:47 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> JD -
>
> You really need my CD for the TR-4C if you plan to work on this radio.
> It's way too complex to
> follow otherwise.
>
> I've lost track of the s/n of your radio. I've got four of these
> 'projects' going currently and
> they tend to run together!
>
> 46 VDC on the PTO is NOT a good thing.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
> Drake Service Supplement CDs for
> 2-B, 2-C/NT, A, B and C-Line,
> TR-4 and TR-4C
>
>
> JD Reich wrote:
> > Hi Garey,
> >
> > I was looking at the 9-nb schematic, and was trying to test q-4 on this

> > board which on my schematic was close to l5. Wow, am I making this worse!
> > Certainly am being humbled, but I really don't want to have to give in
> and
> > send it for repairs.
> >
> > I retested r140 (this is the power resistor, correct?) and got a reading
> of
> > 153.5 at the top (nearest tube) and 46.4 at the bottom. I followed the
> > red-white to the PTO and am getting 46.4 there as well.
> >
> > JD
> >
> >
> >
> > On Sat, Jan 19, 2013 at 9:33 AM, Garey Barrell k4oah@mindspring.com>
> wrote:
> >
> >> **
>
> >>
> >>
> >> Jim -
> >>
> >> Interesting. The Collector of Q4, the PTO supply, and one end of R140
> are
> >> all tied together. The
> >> Wht/Red wire from R140 goes toeither the PTO or Q4 Collector first and
> >> then on to the other. You
> >> earlier said you measured 105 VDC on R140. One end will be 150 VDC, and
> >> the other should be 11-12
> >> VDC, NOT 105. Something not right here..........
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[Non-text portions of this message have been removed]

11534. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 16:12:01 UTC
From: Garey Barrell
Topic: 10991 Message: 11534

Hi JD -

I assume you mean 11.9 k ohms for R140. I'm sorry, I've got several of these projects going at the
moment and I've forgotten which s/n your TR-4 is?? Want to make sure I get the right schematic!

One end of R140 should be tied to Pin 1 or Pin 5 of V20, and should have very close to +150 VDC on
it. The other end of R140 'should' have ~11 VDC on it, and should be connected to the PTO (Wht/red
wire into PTO via hole in bottom) and to the Collector of Q4 (if present).

The reason you are seeing such a high voltage is because either the Zener diode inside the PTO has
failed open, or the 100 ohm decoupling resistor to it has openedup. I suspect a failed Zener. If
this is the case, then both semiconductors inside the PTO are likely failed and will have to be
replaced. If the problem is just that the 100 ohm resistor has opened up then perhaps the Zener
failed shorted, and the semi's areprotected. Q4, if present, may or may not be destroyed by the
overvoltage. You can just disconnect Q4, it's only job is to kill the PTO and allow the RV-4 to
control the transceiver. So get it out of the way.

You're going to have to pull the PTO. First remove the MAIN TUNING knob and dial plate. There are
three spade bolts on the gearbox that go through the chassis and have 6-32 nuts on them. There are
three or two wires going into the bottom of the PTO circuit box. They will need to be disconnected
AFTER their location has been photographed and/or drawn / marked, etc., whatever you need to get
them back in the correct places!. There will be three wires with Red, Green and Black. The Red is
+10V, the Black is ground, and the Green is PTO output. Later versions had small coax in place of
the Green lead. You'llhave to remove the light shield and dial diffusion stuff. WARNING! There are
two tiny spacers on the light shield bolts, between the front and sub panels. When you pull the
bolts out, the spacers fall and instantly disappear! Watch for them and catch before they escape....

Work slowly and carefully, and it's a piece of cake. Especially after you've done it a few dozen
times! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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JD Reich wrote:
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> pictures, all of which have been very helpful.
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> Back to the TR-4 I am working on, I again tested across r140 with power off
> and got 11.9 ohms. With power on I get 152.5 voltage to ground at the top
> of r140 and 46.4 at the bottom, with the red wire.
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> I also am getting 46.4 volts at the PTO and Q4, so I assume those might be
> bad, however before replacing those, why am I not getting a current drop
> after r140? It seems to test within the spec of 12k, but doesn't seem to be
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>> You really need my CD for the TR-4C if you plan to work on this radio.
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11535. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 16:14:29 UTC
From: Jim Wiley
Topic: 10991 Message: 11535

Something must be amiss here. According to your statement (below), you have 106 volts across R140. (152.5 minus 46.4 equals 106.1). You also say R140 measures 11.9 ohms. If these measurements are correct, there is a problem. Using ohms law, those numbers equate to 8.91 amperes through R140. That comes to 945 watts!

May I respectfully suggest some re-checking is in order.

- Jim, KL7CC

On 1/27/2013 6:39 AM, JD Reich wrote:
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>
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> pictures, all of which have been very helpful.
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> thanks
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[Non-text portions of this message have been removed]

11536. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 16:15:13 UTC
From: Garey Barrell
Topic: 10991 Message: 11536

JD -

One more thought. Be sure that the Red Wht/red wire is actually connected inside the PTOand hasn't
come loose. Verify connections between the Collector of Q4, the PTO input, and the 'low' voltage
end of R140

73, Garey - K4OAH
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>>>>>> JD -
>>>>>>
>>>>>> Check the voltage at the 'other end' of that resistor just to be sure.
>>>> You
>>>>>> should get about 11 VDC
>>>>>> on one end and 150V on the other end. The 11 VDC end is the supply for
>>>> Q4
>>>>>> and the PTO. IF you
>>>>>> measure 105 VDC on the 11V end, the PTO and/or Q4 are blown. Do you
>> have
>>>>>> the Service CD yet?? Q4
>>>>>> is on Board 1. If it has more than 11 VDC on it, it's blown
>>>>>>
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>>
>>>>>>
>>>>>> JD Reich wrote:
>>>>>>> Hi Garey,
>>>>>>>

>>>>>>> I tested and got a reading of 105v from the top of the resistor where
>>>> it
>>>>>> connects to the terminal. This was using the positive lead of the
>>>>>> multimeter to the terminal/top of resistor to the other side of the
>>>>>> resistor where the white and red wire was soldered having my
>> multimeter
>>>> set
>>>>>> to 200, measuring volts dc. The white red wire did look a bit
>>>>>> brown/scorched where it was soldered to the resistor.
>>>>>>> I hope I'm doing this right, and again, thanks for your guidance and
>>>>>> patience.
>>>>>>> JD
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> Sent from my iPhone
>>>>>>>
>>>>>>> On Jan 17, 2013, at 1:50 PM, Garey Barrell k4oah@...>
>>>> wrote:
>>>>>>>> JD -
>>>>>>>>
>>>>>>>> I think we better check the +10V bus since you had 0A2 troubles.
>>>>>>>>
>>>>>>>> Socket V20. There is a power resistor hanging on the side of the
>>>> socket
>>>>>> turret of V20. The terminal
>>>>>>>> at the 'top' with the resistor lead and the Wht/Red wireshould read
>>>>>> about 11 VDC.
>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>> JD Reich wrote:
>>>>>>>>> Thank you Garey,
>>>>>>>>>
>>>>>>>>> I did confirm that the switch was switched to TCVR; it was and I
>>>>>> switched
>>>>>>>>> it back and forth; this was working prior to these problems.
>>>>>>>>>
>>>>>>>>> I did get a 0.1A plate current, but when I increased XMTR gain, the
>>>>>> current
>>>>>>>>> remained at 0.1a on 80, 20.
>>>>>>>>>
>>>>>>>>> I also cleaned the relay contact points with DeOxit, and they were
>> a
>>>>>> bit
>>>>>>>>> dirty, but this did not help this particular problem.
>>>>>>>>>
>>>>>>>>> As far as the oscillators go, to determine if they are running or
>>>>>>>>> misaligned, what would the next step be?
>>>>>>>>>

>>>>>>>>> thank you again and 73
>>>>>>>>> JD - W0AJC
>>>>>>>>>
>>>>>>>>> On Thu, Jan 17, 2013 at 12:47 PM, Garey Barrell
>> k4oah@...
>>>>>>> wrote:
>>>>>>>>>> **
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> JD -
>>>>>>>>>>
>>>>>>>>>> OK. Let's try again.
>>>>>>>>>>
>>>>>>>>>> Confirm that slide switch on left side near rear is in 'TCVR'
>>>>>> position.
>>>>>>>>>> Always tune the transmitter in X-CW position, with filter switch
>> set
>>>>>> to
>>>>>>>>>> 'X'. A key is not necessary
>>>>>>>>>> and should NOT be plugged in.
>>>>>>>>>>
>>>>>>>>>> Switch from SSB to X-CW with XMTR GAIN at 0 and see if you get
>> 0.1A
>>>> of
>>>>>>>>>> PLATE current. If so, then
>>>>>>>>>> increase XMTR GAIN to about 10 o'clock and adjust RF TUNE for an
>>>>>> increase
>>>>>>>>>> in current, then quickly
>>>>>>>>>> dipthe PLATE control for minimum current.
>>>>>>>>>>
>>>>>>>>>> If NO PLATE current when you switch to X-CW, with XMTR GAIN at 0,
>> PA
>>>>>>>>>> circuit is not complete and
>>>>>>>>>> will need further troubleshooting.
>>>>>>>>>>
>>>>>>>>>> If PLATE current does NOT increase when XMTR GAIN is increased,
>> then
>>>>>> one
>>>>>>>>>> or more oscillators are not
>>>>>>>>>> running, or alignment is seriously maladjusted.
>>>>>>>>>>
>>>>>>>>>> DeoxIT or alcoholif that's all that you have applied to a strip of
>>>>>> heavy
>>>>>>>>>> paper, file card or
>>>>>>>>>> business card drawn through relay contacts may help. The contact
>> on
>>>>>> top,
>>>>>>>>>> just to left of center, is
>>>>>>>>>> the Receive contact. Insert paper and slowly withdraw. Card will
>>>>>> probably

>>>>>>>>>> show black stripe.
>>>>>>>>>> Continue until stripe no longer appears.
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>
>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> JD Reich wrote:
>>>>>>>>>>> Good Morning Glen,
>>>>>>>>>>>
>>>>>>>>>>> Sorry for the delayed response; have just gotten around to
>> testing.
>>>>>> Thank
>>>>>>>>>>> you for your help thus far; this is my first time working on this
>>>>>> Drake,
>>>>>>>>>> so
>>>>>>>>>>> please bear with my ignorance, i.e, capacitor C79. :)
>>>>>>>>>>>
>>>>>>>>>>> I tested the ac-4 and am getting proper voltage to all pins
>>>>>>>>>>>
>>>>>>>>>>> I put in the new a02 tube, and am getting 149.9 voltage to pin 1
>>>>>>>>>>>
>>>>>>>>>>> The tubes, v1, v5 and v13 are warm and have a slight glow.
>>>>>>>>>>>
>>>>>>>>>>> Some history; I put a new coax input on, however the inner metal
>>>>>> sleeve
>>>>>>>>>> was
>>>>>>>>>>> too long, shorting out with a wire just inside the rig, behind
>> the
>>>>>> coax
>>>>>>>>>>> input, I believe putting the rig into transmit; by the time I
>>>>>> realized
>>>>>>>>>>> this, it was 30-40 seconds so unsure if this might have caused a
>>>>>>>>>> problem. I
>>>>>>>>>>> was getting receive after this however.
>>>>>>>>>>>
>>>>>>>>>>> I also attempted to tune on AM using a keyer, but hindsight, I
>>>> don't
>>>>>>>>>>> believe I had the correct adapter for the key to match this
>> Drake;
>>>>>>>>>> perhaps
>>>>>>>>>>> that shorted something?
>>>>>>>>>>>
>>>>>>>>>>> Prior to this night, it was receiving and transmitting fine; with
>>>> the
>>>>>>>>>>> exception of a bad so-239 input was gave intermittent and

>> scratchy
>>>>>>>>>> receive
>>>>>>>>>> at times. It would also have low transmit after some
>> transmissions,
>>>>>> which
>>>>>>>>>> is why I replaced the c5 in the ac-4. Other than that, it was
>>>> tuning
>>>>>> up
>>>>>>>>>> and
>>>>>>>>>> receiving.
>>>>>>>>>>
>>>>>>>>>> Now, I cannot get receive or power out.
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>> The finals all have a glow to them.
>>>>>>>>>>
>>>>>>>>>> Any suggestions on the next step?
>>>>>>>>>>
>>>>>>>>>> thank you
>>>>>>>>>> JD-W0AJC
>>>>>>>>>>
>>
>>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11537. Re: [DrakeRadio] Drake TR-4 resistor

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 17:29:31 UTC
From: Garey Barrell
Topic: 10991 Message: 11537

Jim -

Yeah, but we miniaturized the Watt! :-)

R140 is a 12k resistor. And there's 'supposed to be' a 10V Zener on bottom end. Obviously not!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Wiley wrote:
> Something must be amiss here. According to your statement (below), you
> have 106 volts across R140. (152.5 minus 46.4 equals 106.1). You also
> say R140 measures 11.9 ohms. If these measurements are correct, there
> is a problem. Using ohms law, those numbers equate to 8.91 amperes
> through R140. That comes to 945 watts!
>
> May I respectfully suggest some re-checking is in order.
>
>
> - Jim, KL7CC
>
>
> On 1/27/2013 6:39 AM, JD Reich wrote:
>> Morning Garey,
>>
>> I received the CD and it is such a great assortment of documentation and
>> pictures, all of which have been very helpful.
>>
>> Back to the TR-4 I am working on, I again tested across r140 with power off
>> and got 11.9 ohms. With power on I get 152.5 voltage to ground at the top
>> of r140 and 46.4 at the bottom, with the red wire.
>>
>> I also am getting 46.4 volts at the PTO and Q4, so I assume those might be
>> bad, however before replacing those, why am I not getting a current drop
>> after r140? It seems to test within the spec of 12k, but doesn't seem to be
>> dropping the 152.5 volts down?
>>
>> thanks
>> JD
>>
>

>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11538. Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-27 23:08:19 UTC
From: Tom
Topic: 11516 Message: 11538

Seems other Drake stuff has been high lately. 3300 high (?) pass filters that usually go for about 15 have been 35 and 45 lately. Saw a beautiful C-4 console with power strip that topped 800, though it was a very nice looking unit. Tom wa9yi

--- In DrakeRadio@yahoogroups.com, Darrell Bellerive wrote:
>
> I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> the price these fetched. Perhaps I should part out all my Drake gear and
> retire. :-)
>
> For those interested here are the completed eBay listings:
> Item number: 181068360432
> Item number: 170979653196
>
> 73, Darrell VA7TO
>
>
> --
> Darrell Bellerive
>

11539. New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 04:10:23 UTC
From: Richard
Topic: 2733 Message: 11539

At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.

I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.

I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.

Having cut my teeth on vacuum tube gear I am finding that I am returning to my roots. My current Boatanchor project is a 2B restoration. This is the 4th 2B I've owned, so I think I'll keep this one!!!

This group seems like a good place to share info and learn things, which is why I joined.

Hope to see some of you on the air.

vy 73

Rich K7SZ

11540. Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 03:44:20 UTC
From: Richard
Topic: 11540 Message: 11540

Need a 2B front panel in good condx OR referral to someone who can re-screen the front panel off of my current 2B.

Pls reply off-list to: k7sz@live.com

73 es tnx
Rich K7SZ

11541. hey

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 12:42:44 UTC
From: Gary S
Topic: 8059 Message: 11541

almost cannot believe it..what do you think http://bit.ly/14m8eo8

Gary

[Non-text portions of this message have been removed]

11542. hey

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 13:47:17 UTC
From: Fred Zimring
Topic: 8059 Message: 11542

this reminded me of you http://bit.ly/122EZHt

Fred

[Non-text portions of this message have been removed]

11543. Re: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 13:56:11 UTC
From: Steve Wedge
Topic: 2733 Message: 11543

Welcome to the group, Rich.

Hoping to see more posts drawing upon your experience.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard
Sent: Sunday, January 27, 2013 11:10 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] New Member

At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.

I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.

I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.

Having cut my teeth on vacuum tube gear I am finding that I am returning to my roots. My current Boatanchor project is a 2B restoration. This is the 4th 2B I've owned, so I think I'll keep this one!!!

This group seems like a good place to share info and learn things, which is why I joined.

Hope to see some of you on the air.

vy 73

Rich K7SZ

[Non-text portions of this message have been removed]

11544. Re: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 14:15:33 UTC
From: Bernie
Topic: 2733 Message: 11544

Richard,
Thanks for joining the group. With your experience I'm sure you will be a strong asset and resource for the group along with Garey and others. Thanks for sharing your knowledge. 73

Bernie in ND
WD0GMD

----- Original Message -----
From: Richard
To: DrakeRadio@yahoogroups.com
Sent: Sunday, January 27, 2013 10:10 PM
Subject: [DrakeRadio] New Member

At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.

I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.

I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.

Having cut my teeth on vacuum tube gear I am finding that I am returning to my roots. My current Boatanchor project is a 2B restoration. This is the 4th 2B I've owned, so I think I'll keep this one!!!

This group seems like a good place to share info and learn things, which is why I joined.

Hope to see some of you on the air.

vy 73

Rich K7SZ

[Non-text portions of this message have been removed]

11545. Re: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 14:44:18 UTC
From: Dino Papas
Topic: 2733 Message: 11545

Somehow I knew you'd show up over here sooner or later! Welcome aboard!

73 - Dino KL0S

Begin forwarded message:

> From: "Richard" <k7sz@...>
> Subject: [DrakeRadio] New Member
> Date: Jan 27, 2013 2310 PM EST
> To: DrakeRadio@yahoogroups.com
> Reply-To: DrakeRadio@yahoogroups.com
>
> At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.
>
> I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.
>
> I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.
>
> Having cut my teeth on vacuum tube gear I am finding that I am returning to my roots. My current Boatanchor project is a 2B restoration. This is the 4th 2B I've owned, so I think I'll keep this one!!!
>
> This group seems like a good place to share info and learn things, which is why I joined.
>
> Hope to see some of you on the air.
>
> vy 73
>
> Rich K7SZ

[Non-text portions of this message have been removed]

11546. Re: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 15:01:00 UTC
From: Don Cunningham
Topic: 2733 Message: 11546

Welcome to the list, Richard.

73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11547. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 15:18:27 UTC
From: Henry L. Dorkin
Topic: 11547 Message: 11547

This message was originally HTML formatted. View in a HTML capable client to see the original version.\r\n\r\n Welcome to the Group, Rich. As a fellow " first licensed in 1963 at the age of 16" ham, I too think fondly of my first rig (well, pretty fondly for the Eico 720 I built, not quite so much the NC-190 receiver which drifted faster than I could turn the dial). Anyway, Ron Baker (wb4hfn@...) just restored my Drake 2B and 2BQ - they look like they just arrived via time-warp from Miamisburg. I would touch base with him about your needs. He is a great guy who has worked on my C-lne as well, and many on the internet here know him well, and the results of his efforts. His on-line website is one of the ones that nicely lists resources for Drake parts and such. I have learned a lot from my interaction with him.

73 -

Hank WM1V (ex WN2HOS)

---- Original Message ----
From: "Richard" k7sz@...
Sent: 1/28/2013 1:33:58 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Drake 2B Restoration

Need a 2B front panel in good condx OR referral to someone who can re-screen the front panel off of my current 2B.

Pls reply off-list to: k7sz@...

73 es tnx
Rich K7SZ

[Non-text portions of this message have been removed]

11548. Cinch Jones Connectors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 16:03:27 UTC
From: k5fex
Topic: 11548 Message: 11548

Anyone ever tried change out a single pin on the power connector on a T4-XC? Have one pin of the 12 that is damaged. Don't want to change the entire connector. Lots of caps and wires!

11549. Re: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 17:05:11 UTC
From: Mike
Topic: 2733 Message: 11549

Egads!

Looks like its down hill from here!

Mike wb8vge

Sent from my iPhone

On Jan 28, 2013, at 9:44 AM, Dino Papas <kl0s@...> wrote:

> Somehow I knew you'd show up over here sooner or later! Welcome aboard!
>
> 73 - Dino KL0S
>
> Begin forwarded message:
>
> > From: "Richard" k7sz@...>
> > Subject: [DrakeRadio] New Member
> > Date: Jan 27, 2013 2310 PM EST
> > To: DrakeRadio@yahoogroups.com
> > Reply-To: DrakeRadio@yahoogroups.com
> >
> > At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.
> >
> > I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.
> >
> > I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.
> >
> > Having cut my teeth on vacuum
>
>

[Non-text portions of this message have been removed]

11550. RE: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 19:25:57 UTC
From: Steve Garwood
Topic: 11516 Message: 11550

I agree! Without unobtainable parts being available, many of my projects would have just faded away. I would prefer to fix rather than part out - I'm glad that there are a few individuals doing this.

The parts made available are long out of production - only place to get replacements is another radio - works the same as cars.. Can't save 'em all!

Because of all of the parts available, I've been able to restore more radios.. All of my TR-7's have updated boards in them. Someone will end up with some good radios someday. We are just caretakers of some of this gear, hopefully it will go on, outlasting me.

Besides that, I don't have the room to store parts radios obtained to fix others - much better to just get what I need - sharing the wealth!

"If you STAY ready, you never have to GET ready."

Steve, N0CZV

Attica, Ohio

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of qrper
Sent: Saturday, January 26, 2013 6:57 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: eBay Prices!

needless to say, that's suppose to be people and not propel...

mike

--- In DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> , Mike wrote:
>
> Actually
>
> I'am glad that propel do that.
>
> Without someone parting out radios, I could not keep the ones I have going.
>
> Hurts? You betcha!
>
> Sometimes the good of the many out weighs the need of the one.
>
> Mike wb8vge
>

> Sent from my iPhone
>
> On Jan 26, 2013, at 11:07 AM, Garey Barrell wrote:
>
> > Darrell -
> >
> > This is why you see people scrapping perfectly good radios!! Works just
like cars, $20k car has
> > $40k of parts, bought individually.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> >
> >
> > Darrell Bellerive wrote:
> > > I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> > > the price these fetched. Perhaps I should part out all my Drake gear
and
> > > retire. :-)
> > >
> > > For those interested here are the completed eBay listings:
> > > Item number: 181068360432
> > > Item number: 170979653196
> > >
> > > 73, Darrell VA7TO
> > >
> > >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

11551. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:19:06 UTC
From: Darrell Bellerive
Topic: 11516 Message: 11551

What is involved in making reproduction parts? For example: Is is practical to have knobs made?

Someone on eBay just spent $53.59 for a 2-A/B/C main tuning knob without the dial skirt and someone else $28.59 for a 2-A/B/C preselector style knob.

I would like to have two preselector style knobs, but am not willing to pay over $50 for them.

Could reproductions be made cost effectively in small quantities? How many of us would buy knobs? 50? 100?

As a former boss of mine liked to say "Being unencumbered by knowledge..." I know nothing about what it would take to make reproduction knobs, but am curious. Anyone with experience in this type of thing have comments?

73, Darrell VA7TO

Darrell Bellerive

On 13-01-28 11:25 AM, Steve Garwood wrote:
> I agree! Without unobtainable parts being available, many of my projects
> would have just faded away. I would prefer to fix rather than part out -
> I'm glad that there are a few individuals doing this.
>
>
>
> The parts made available are long out of production - only place to get
> replacements is another radio - works the same as cars.. Can't save 'em all!
>
>
>
> Because of all of the parts available, I've been able to restore more
> radios.. All of my TR-7's have updated boards in them. Someone will end up
> with some good radios someday. We are just caretakers of some of this gear,
> hopefully it will go on, outlasting me.
>
>
>
> Besides that, I don't have the room to store parts radios obtained to fix
> others - much better to just get what I need - sharing the wealth!
>
>
>
> "If you STAY ready, you never have to GET ready."
>

>
>
> Steve, N0CZV
>
> Attica, Ohio
>

11552. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:22:46 UTC
From: Dino Papas
Topic: 11516 Message: 11552

Sounds like a great project for someone with a 3D printer!

Dino KL0S

On Jan282013, at 1619 PM, Darrell Bellerive wrote:

> What is involved in making reproduction parts? For example: Is is
> practical to have knobs made?
>
> Someone on eBay just spent $53.59 for a 2-A/B/C main tuning knob without
> the dial skirt and someone else $28.59 for a 2-A/B/C preselector style knob.
>
> I would like to have two preselector style knobs, but am not willing to
> pay over $50 for them.
>
> Could reproductions be made cost effectively in small quantities? How
> many of us would buy knobs? 50? 100?
>
> As a former boss of mine liked to say "Being unencumbered by
> knowledge..." I know nothing about what it would take to make
> reproduction knobs, but am curious. Anyone with experience in this type
> of thing have comments?
>
> 73, Darrell VA7TO
>
> Darrell Bellerive
>
> On 13-01-28 11:25 AM, Steve Garwood wrote:
> > I agree! Without unobtainable parts being available, many of my projects
> > would have just faded away. I would prefer to fix rather than part out -
> > I'm glad that there are a few individuals doing this.
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> > The parts made available are long out of production - only place to get
> > replacements is another radio - works the same as cars.. Can't save 'em all!
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> >
> > Because of all of the parts available, I've been able to restore more
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> > with some good radios someday. We are just caretakers of some of this gear,
> > hopefully it will go on, outlasting me.
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> > Besides that, I don't have the room to store parts radios obtained to fix
> > others - much better to just get what I need - sharing the wealth!
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> > "If you STAY ready, you never have to GET ready."
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> > Steve, N0CZV
> >
> > Attica, Ohio
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[Non-text portions of this message have been removed]

11553. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:39:10 UTC
From: Mike
Topic: 11516 Message: 11553

To reproduce perfect copies one would need the original molds.

If not then those molds would need to be made. Figure about 4 grand each for a plastic injection molding machine. Two molds are normally required.

Perhaps off shore? It would be possible and more than likely cheaper.

But you would still end up with mold cost, set up charges, shipping, and the cost of the part plus a few bucks profit.

Then there is basic demand. How many could you possibly sell? What's the market? Would you pay $80-$100 for a knob for a radio?

I've been thinking of coming out with a metal cover for the ac4. A few more vent holes and a powered fan for extra cooling.

The people that make my cabinets quoted me $18 for the top. Add in a Dx fan, hardware, finger guard, and some $$ to cover my cost and I guess the cover with a fan would need to go out the door at about $30.

Is there a market that will spend that amount of money for a hunk of metal an a small fan?

I don't believe there is.

I looked into making replacement dials for the rigs. Until reality slapped me across the face. That's why no one is making them.

Mike wn8vge

Sent from my iPhone

On Jan 28, 2013, at 4:19 PM, Darrell Bellerive <drbellerive.va7to@...> wrote:

> What is involved in making reproduction parts? For example: Is is
> practical to have knobs made?
>
> Someone on eBay just spent $53.59 for a 2-A/B/C main tuning knob without
> the dial skirt and someone else $28.59 for a 2-A/B/C preselector style knob.
>
> I would like to have two preselector style knobs, but am not willing to
> pay over $50 for them.
>
> Could reproductions be made cost effectively in small quantities? How
> many of us would buy knobs? 50? 100?
>
> As a former boss of mine liked to say "Being unencumbered by
> knowledge..." I know nothing about what it would take to make
> reproduction knobs, but am curious. Anyone with experience in this type

> of thing have comments?
>
> 73, Darrell VA7TO
>
>
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> .
>
>

[Non-text portions of this message have been removed]

11554. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:40:38 UTC
From: Dan Galligan
Topic: 11516 Message: 11554

Darrell,
I can't speak to the feasibility of making reproductions, but I do know that often times you will be able to find what you need from Mark, at www.ke9pq.com/, Nationwide Radio & Eq. Sales in Milwaukee, WI, or from Gary WZ1M at Transformer Rewinding Service, in Orono, ME. Gary's webpage is www.tubes_tubes_tubes.tripod.com/
Both, sell good quality, good condition used parts for old boatanchors, and are honest, reputable dealers, of the products they sell. I have always been treated fairly, paid fair market value, and got fast service, from BOTH of them. I recommend them highly.

73,
de Dan
W3RXO/W6

Due to excessive whining, by those cranky individuals, who may receive my messages, any potentially offensive, politically incorrect, signature lines, have purposely been removed from this email, to avoid offending the overly sensitive, chronically offended, type of politically correct people, with no sense of humor. AKA Puckerbutts!

The smallest minority on earth is the individual. Those who deny individual rights cannot claim to be defenders of minorities. Ayn Rand

A nation of sheep, will beget a government of wolves. Edward R. Murrow
CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. This email is intended to be reviewed by only the individual or organization named above. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, is prohibited.

[Non-text portions of this message have been removed]

11555. Re: [DrakeRadio] Re:make Drake parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:57:58 UTC
From: Chgypsy@...
Topic: 11555 Message: 11555

drbellerive.va7to@... writes:

What is involved in making reproduction parts? For example: Is is practical to have knobs made?
Donnie, (Muncie, In) might know...he had or still has a bunch of Drake parts that he built and sold. Hope he reads this. Carl wd8nhk

[Non-text portions of this message have been removed]

11556. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 21:59:08 UTC
From: Steve Wedge
Topic: 11516 Message: 11556

Even real junkers can have a wealth of good parts in them.

I do keep one T-4XB in a closet for parts: it had been butchered pretty badly and would take weeks to set right (Pete Juliano knows - he got one from the same guy and spent weeks on it). I've scrounged a cover, ball drive and PTO from mine so far to make complete, working rigs. I do sometimes get tempted to sell off the rest of the parts of this one, so ask if you need a B-Line part as I may have one available.

Krusty the Transmitter is one story of a resurrected rig. I wish I had saved the pics the seller put up on eBay, as I didn't do any "before" photography. This rig looked like it would never work again and was missing a top cover. A lot of cleaning and tweaking later, plus a spare cover and it's back on the air!

BTW, you can see Krusty on eBay right now, if you wanna see how he came out:

http://www.ebay.com/itm/140910638943?ssPageName=STRK:MESELX:IT&_trksid=p3984.m1555.l2649

Not really a solicitation, as I had offered to sell previously - just easier to give y'all easier access to all the pics!

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Garwood
Sent: Monday, January 28, 2013 2:25 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Re: eBay Prices!

I agree! Without unobtainable parts being available, many of my projects
would have just faded away. I would prefer to fix rather than part out -
I'm glad that there are a few individuals doing this.

The parts made available are long out of production - only place to get
replacements is another radio - works the same as cars.. Can't save 'em all!

Because of all of the parts available, I've been able to restore more
radios.. All of my TR-7's have updated boards in them. Someone will end up
with some good radios someday. We are just caretakers of some of this gear,
hopefully it will go on, outlasting me.

Besides that, I don't have the room to store parts radios obtained to fix
others - much better to just get what I need - sharing the wealth!

"If you STAY ready, you never have to GET ready."

Steve, N0CZV

Attica, Ohio

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of qrper
Sent: Saturday, January 26, 2013 6:57 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: eBay Prices!

needless to say, that's suppose to be people and not propel...

mike

--- In DrakeRadio@yahoogroups.com ,
Mike wrote:
>
> Actually
>
> I'am glad that propel do that.
>
> Without someone parting out radios, I could not keep the ones I have going.
>
> Hurts? You betcha!
>
> Sometimes the good of the many out weighs the need of the one.
>
> Mike wb8vge
>
> Sent from my iPhone
>
> On Jan 26, 2013, at 11:07 AM, Garey Barrell wrote:
>
> > Darrell -
> >
> > This is why you see people scrapping perfectly good radios!! Works just like cars, $20k car has
> > $40k of parts, bought individually.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> >
> >
> > Darrell Bellerive wrote:
> > > I just saw two eBay sales for Drake 2-A/B/C knobs. I was astounded by
> > > the price these fetched. Perhaps I should part out all my Drake gear and
> > > retire. :-)

> > >
> > > For those interested here are the completed eBay listings:
> > > Item number: 181068360432
> > > Item number: 170979653196
> > >
> > > 73, Darrell VA7TO
> > >
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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11557. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 22:01:24 UTC
From: Steve Wedge
Topic: 11516 Message: 11557

It all depends, but would mostly hinge upon finding a hobbyist who could make them for you for fun. Any of these parts can be reproduced; a lot of the knobs for the 4-Line are available as new parts still.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Darrell Bellerive
Sent: Monday, January 28, 2013 4:19 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: eBay Prices!

What is involved in making reproduction parts? For example: Is is practical to have knobs made?

Someone on eBay just spent $53.59 for a 2-A/B/C main tuning knob without the dial skirt and someone else $28.59 for a 2-A/B/C preselector style knob.

I would like to have two preselector style knobs, but am not willing to pay over $50 for them.

Could reproductions be made cost effectively in small quantities? How many of us would buy knobs? 50? 100?

As a former boss of mine liked to say "Being unencumbered by knowledge..." I know nothing about what it would take to make reproduction knobs, but am curious. Anyone with experience in this type of thing have comments?

73, Darrell VA7TO

Darrell Bellerive

On 13-01-28 11:25 AM, Steve Garwood wrote:
> I agree! Without unobtainable parts being available, many of my projects
> would have just faded away. I would prefer to fix rather than part out -
> I'm glad that there are a few individuals doing this.
>
>
>
> The parts made available are long out of production - only place to get
> replacements is another radio - works the same as cars.. Can't save 'em all!
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> Because of all of the parts available, I've been able to restore more
> radios.. All of my TR-7's have updated boards in them. Someone will end up
> with some good radios someday. We are just caretakers of some of this gear,
> hopefully it will go on, outlasting me.
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> Besides that, I don't have the room to store parts radios obtained to fix
> others - much better to just get what I need - sharing the wealth!
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> "If you STAY ready, you never have to GET ready."
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> Steve, N0CZV
>
> Attica, Ohio
>

[Non-text portions of this message have been removed]

11558. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 22:01:55 UTC
From: Steve Wedge
Topic: 11516 Message: 11558

Never thought of that, Dino. Excellent idea!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: "Dino Papas" <kl0s@...>
Sent: Monday, January 28, 2013 4:22 PM
To: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] Re: eBay Prices!

> Sounds like a great project for someone with a 3D printer!
>
> Dino KL0S
>
> On Jan282013, at 1619 PM, Darrell Bellerive wrote:
>
>> What is involved in making reproduction parts? For example: Is is
>> practical to have knobs made?
>>
>> Someone on eBay just spent $53.59 for a 2-A/B/C main tuning knob without
>> the dial skirt and someone else $28.59 for a 2-A/B/C preselector style
>> knob.
>>
>> I would like to have two preselector style knobs, but am not willing to
>> pay over $50 for them.
>>
>> Could reproductions be made cost effectively in small quantities? How
>> many of us would buy knobs? 50? 100?
>>
>> As a former boss of mine liked to say "Being unencumbered by
>> knowledge..." I know nothing about what it would take to make
>> reproduction knobs, but am curious. Anyone with experience in this type
>> of thing have comments?
>>
>> 73, Darrell VA7TO
>>
>> Darrell Bellerive
>>
>> On 13-01-28 11:25 AM, Steve Garwood wrote:
>> > I agree! Without unobtainable parts being available, many of my
>> > projects

>> > would have just faded away. I would prefer to fix rather than part
>> > out -
>> > I'm glad that there are a few individuals doing this.
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>> >
>> > The parts made available are long out of production - only place to get
>> > replacements is another radio - works the same as cars.. Can't save 'em
>> > all!
>> >
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>> >
>> > Because of all of the parts available, I've been able to restore more
>> > radios.. All of my TR-7's have updated boards in them. Someone will end
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>> > with some good radios someday. We are just caretakers of some of this
>> > gear,
>> > hopefully it will go on, outlasting me.
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>> > Besides that, I don't have the room to store parts radios obtained to
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>> > others - much better to just get what I need - sharing the wealth!
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>> > Steve, N0CZV
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11559. RE: [DrakeRadio] Re:make Drake parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 23:29:44 UTC
From: Rich Arland
Topic: 11555 Message: 11559

I wonder if those 3=D printers that the "MAKE" people are using would be a good candidate to produce hard to find parts of these old Boatanchors??

Rich Arland, K7SZ
Dacula, GA

To: DrakeRadio@yahoogroups.com
From: Chgypsy@...
Date: Mon, 28 Jan 2013 16:57:58 -0500
Subject: Re: [DrakeRadio] Re:make Drake parts

drbellerive.va7to@... writes:

What is involved in making reproduction parts? For example: Is is

practical to have knobs made?

Donnie, (Muncie, In) might know...he had or still has a bunch of Drake

parts that he built and sold. Hope he reads this. Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11560. RE: [DrakeRadio] New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 23:41:40 UTC
From: Rich Arland
Topic: 2733 Message: 11560

OK, you two!!! Lighten up.....I'm an old man!!! Can't pitch the BS like I use to! (IF you believe that one I have a bridge connecting two of New Yorks finest boroughs that has been in the family a while that I'm looking to sell!!)

Hey, Bryce....I'll go out on a limb here and take it for granted you'll be at Dayton/FDIM, correct?? I need some one to ride herd on Papas....he tends to lead me astray!!

Rich Arland, K7SZ
Dacula, GA

CC: DrakeRadio@yahoogroups.com
To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Mon, 28 Jan 2013 12:05:11 -0500
Subject: Re: [DrakeRadio] New Member

Egads!

Looks like its down hill from here!

Mike wb8vge

Sent from my iPhone

On Jan 28, 2013, at 9:44 AM, Dino Papas kl0s@...> wrote:

> Somehow I knew you'd show up over here sooner or later! Welcome aboard!

>

> 73 - Dino KL0S

>

> Begin forwarded message:

>

> > From: "Richard" k7sz@...>

> > Subject: [DrakeRadio] New Member

> > Date: Jan 27, 2013 2310 PM EST

> > To: DrakeRadio@yahoogroups.com

> > Reply-To: DrakeRadio@yahoogroups.com

> >

> > At the urging of Garey, K4OAH, I decided to join this group. Over the years I've owned several R4s, a C-Line, four 2Bs, a 2C and 2NT, and a couple of 2M FM rigs.

> >

> > I've been a ham for 50 years, first licensed in 1963 at the age of 16. After college I went into the USAF (Comm Commamd, what else?) and retired after 20 years. For 17 years I taught VoEd Electronics to incarcerated male inmates in a Pennsylvania prison. I retired in 2006 due to medical reasons and have been enjoying retirement ever since.

> >

> > I have written a total of seven books, the last four for the ARRL (all four editions of "The ARRL's Low Power Communications, the Art and Science of QRP"). My by line has appeared in feature articles in Monitoring Times, National Communications, CQ, CQ-VHF, Popular Communications and QST. From Jan 2000 to Dec 2003 I was the QRP editor for QST. I recently retired from "The Learning Curve" column in CQ Magazine.

> >

> > Having cut my teeth on vacuum

>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11561. Re: [DrakeRadio] Re:make Drake parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 23:45:15 UTC
From: Mike
Topic: 11555 Message: 11561

I am not sure.

I'd guess they make a 3-d object to hold in your hand. Could the thing be put to use like a knob? I am not so sure

Mike wb8vge

Sent from my iPhone

On Jan 28, 2013, at 6:29 PM, Rich Arland <k7sz@...> wrote:

>
> I wonder if those 3=D printers that the "MAKE" people are using would be a good candidate to produce hard to find parts of these old Boatanchors??
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
>
> To: DrakeRadio@yahoogroups.com
> From: Chgypsy@...
> Date: Mon, 28 Jan 2013 16:57:58 -0500
> Subject: Re: [DrakeRadio] Re:make Drake parts
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> drbellerive.va7to@... writes:
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> What is involved in making reproduction parts? For example: Is is
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> practical to have knobs made?
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> Donnie, (Muncie, In) might know...he had or still has a bunch of Drake
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> parts that he built and sold. Hope he reads this. Carl wd8nhk
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11562. RE: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-28 23:59:09 UTC
From: Rich Arland
Topic: 11540 Message: 11562

Tnx for the info, Hank. I, too, had an Eico 720 about 20 yrs ago. Rebuilt it and used it for a while. Cute little TX.

I will definitely get in touch with Ron. I don't have a lot of $$ in this receiver so I can spend some cash without feeling too guilty. If a re-screened front panel is over $100, I will probably just wait for a good looking 2B to come up on line and scoop it up and use the one I have for spares.

Thanks again.

Rich Arland, K7SZ
Dacula, GA

To: DrakeRadio@yahoogroups.com
From: dorkinh@...
Date: Mon, 28 Jan 2013 10:18:27 -0500
Subject: Re: [DrakeRadio] Drake 2B Restoration

This message was originally HTML formatted. View in a HTML capable client to see the original version.\r\n\r\n Welcome to the Group, Rich. As a fellow " first licensed in 1963 at the age of 16" ham, I too think fondly of my first rig (well, pretty fondly for the Eico 720 I built, not quite so much the NC-190 receiver which drifted faster than I could turn the dial). Anyway, Ron Baker (wb4hfn@...) just restored my Drake 2B and 2BQ - they look like they just arrived via time-warp from Miamisburg. I would touch base with him about your needs. He is a great guy who has worked on my C-lne as well, and many on the internet here know him well, and the results of his efforts. His on-line website is one of the ones that nicely lists resources for Drake parts and such. I have learned a lot from my interaction with him.

73 -

Hank WM1V (ex WN2HOS)

---- Original Message ----
From: "Richard" k7sz@...
Sent: 1/28/2013 1:33:58 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Drake 2B Restoration

Need a 2B front panel in good condx OR referral to someone who can re-screen the front panel off of my current 2B.

Pls reply off-list to: k7sz@...

73 es tnx
Rich K7SZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11563. hi

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 00:51:38 UTC
From: Fred Zimring
Topic: 8122 Message: 11563

almost cannot believe it..what do you think http://bit.ly/11316Zm

Fred

[Non-text portions of this message have been removed]

11564. Re: [DrakeRadio] Re: eBay Prices!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 01:32:33 UTC
From: Jim Shorney
Topic: 11516 Message: 11564

On Mon, 28 Jan 2013 13:19:06 -0800, Darrell Bellerive wrote:

>
>What is involved in making reproduction parts? For example: Is is
>practical to have knobs made?

K9STH makes some repro Heath knobs with some sort of resin casting process. So,
it can be done.

http://k9sth.com/uploads/Heath_knobs.JPG

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

11565. Re:make Drake parts

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 03:30:06 UTC
From: w1kilofoxtrot
Topic: 11555 Message: 11565

Yep, it's a growing use case. The Tek group has a fellow making all sorts of un-obtanium decorative parts to restore older units. One could print knobs, trim parts, even interior parts like lamp mounts.

'Course, $500 is a lot to spend to make a 2-B tuning knob...

73,
Steve
W1KF

--- In DrakeRadio@yahoogroups.com, Mike wrote:
>
> I am not sure.
>
> I'd guess they make a 3-d object to hold in your hand. Could the thing be put to use like a knob? I am not so sure
>
> Mike wb8vge
>
> Sent from my iPhone
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> On Jan 28, 2013, at 6:29 PM, Rich Arland wrote:
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> > I wonder if those 3=D printers that the "MAKE" people are using would be a good candidate to produce hard to find parts of these old Boatanchors??
> >
> >
> > Rich Arland, K7SZ
> > Dacula, GA
> >
> >
> > To: DrakeRadio@yahoogroups.com
> > From: Chgypsy@...
> > Date: Mon, 28 Jan 2013 16:57:58 -0500
> > Subject: Re: [DrakeRadio] Re:make Drake parts
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> > drbellerive.va7to@... writes:
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> > What is involved in making reproduction parts? For example: Is is
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> > Donnie, (Muncie, In) might know...he had or still has a bunch of Drake
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> > parts that he built and sold. Hope he reads this. Carl wd8nhk
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11566. Re: New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 04:39:07 UTC
From: qrper
Topic: 2733 Message: 11566

rich,

yeah, if I don't die between now and then.

won't be at the fdim, unless I pop in, a friend has a room about a mile from the fest and it's a lot quicker to get and come back from other than fairlawn or whatever it's called.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:
>
>
> OK, you two!!! Lighten up.....I'm an old man!!! Can't pitch the BS like I use to! (IF you believe that one I have a bridge connecting two of New Yorks finest boroughs that has been in the family a while that I'm looking to sell!!)
>
> Hey, Bryce....I'll go out on a limb here and take it for granted you'll be at Dayton/FDIM, correct?? I need some one to ride herd on Papas....he tends to lead me astray!!
>
>
> Rich Arland, K7SZ
> Dacula, GA
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>
> CC: DrakeRadio@yahoogroups.com
> To: DrakeRadio@yahoogroups.com
> From: prosolar@...
> Date: Mon, 28 Jan 2013 12:05:11 -0500
> Subject: Re: [DrakeRadio] New Member
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> Sent from my iPhone
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> > 73 - Dino KL0S
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> > Begin forwarded message:
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> > > From: "Richard" k7sz@...>
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> > > Subject: [DrakeRadio] New Member
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> > > Date: Jan 27, 2013 2310 PM EST
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> > > To: DrakeRadio@yahoogroups.com
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> > > Reply-To: DrakeRadio@yahoogroups.com
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11567. RE: [DrakeRadio] Re: New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 05:03:20 UTC
From: Rich Arland
Topic: 2733 Message: 11567

OK, cool! Let's make it a point to get together, as I always enjoy my time hanging around you. Great minds and all that stuff!!

Rich Arland, K7SZ
Dacula, GA

To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Tue, 29 Jan 2013 04:39:07 +0000
Subject: [DrakeRadio] Re: New Member

rich,

yeah, if I don't die between now and then.

won't be at the fdim, unless I pop in, a friend has a room about a mile from the fest and it's a lot quicker to get and come back from other than fairlawn or whatever it's called.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:

>

>

> OK, you two!!! Lighten up.....I'm an old man!!! Can't pitch the BS like I use to! (IF you believe that one I have a bridge connecting two of New Yorks finest boroughs that has been in the family a while that I'm looking to sell!!)

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> Hey, Bryce....I'll go out on a limb here and take it for granted you'll be at Dayton/FDIM, correct?? I need some one to ride herd on Papas....he tends to lead me astray!!

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> Rich Arland, K7SZ

> Dacula, GA

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> CC: DrakeRadio@yahoogroups.com

> To: DrakeRadio@yahoogroups.com

> From: prosolar@...

> Date: Mon, 28 Jan 2013 12:05:11 -0500

> Subject: Re: [DrakeRadio] New Member

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> > > From: "Richard" k7sz@...>

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> > > Subject: [DrakeRadio] New Member

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> > > Date: Jan 27, 2013 2310 PM EST

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> > > To: DrakeRadio@yahoogroups.com

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> > > Reply-To: DrakeRadio@yahoogroups.com

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11568. Re: New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 05:20:53 UTC
From: qrper
Topic: 2733 Message: 11568

You just want an encore of the killer bees!

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:
>
>
> OK, cool! Let's make it a point to get together, as I always enjoy my time hanging around you. Great minds and all that stuff!!
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> Rich Arland, K7SZ
> Dacula, GA
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> To: DrakeRadio@yahoogroups.com
> From: prosolar@...
> Date: Tue, 29 Jan 2013 04:39:07 +0000
> Subject: [DrakeRadio] Re: New Member
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> > To: DrakeRadio@yahoogroups.com
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> > From: prosolar@

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> > > > Date: Jan 27, 2013 2310 PM EST
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11569. RE: [DrakeRadio] Re: New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 05:27:27 UTC
From: Rich Arland
Topic: 2733 Message: 11569

You gotta admit, that was funny!!! As a matter of fact that was the first time we'd met! good times!!

Rich Arland, K7SZ
Dacula, GA

To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Tue, 29 Jan 2013 05:20:53 +0000
Subject: [DrakeRadio] Re: New Member

You just want an encore of the killer bees!

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:

>

>

> OK, cool! Let's make it a point to get together, as I always enjoy my time hanging around you. Great minds and all that stuff!!

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>

> Rich Arland, K7SZ

> Dacula, GA

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> To: DrakeRadio@yahoogroups.com

> From: prosolar@...

> Date: Tue, 29 Jan 2013 04:39:07 +0000

> Subject: [DrakeRadio] Re: New Member

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> > CC: DrakeRadio@yahoogroups.com

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> > To: DrakeRadio@yahoogroups.com

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> > From: prosolar@

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> > Date: Mon, 28 Jan 2013 12:05:11 -0500

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> > Subject: Re: [DrakeRadio] New Member

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11570. Re: [DrakeRadio] Drake 2-B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 21:03:38 UTC
From: Garey Barrell
Topic: 2733 Message: 11570

Rich -

Seems as if your reputation has preceded you here! :-)

You might want to check with Tom at Hayseedhamfest.com about a front panel 'overlay' for the 2-B.
He doesn't have one for the 2-B yet, but could be convinced! He's pretty busy making electrolytics,
but I think his Son actuallydoes the panels. They're about 6 mils thick, and just stick on and then
cut out openings with an X-Acto knife. I was concerned about the slide switch openings, but after
seeing a hi-res photo I don't think it'd be a problem. Probably about $35.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

11571. L-4B (and others) Switch assembly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 23:15:05 UTC
From: Mark Pilant
Topic: 11571 Message: 11571

I just purchased a couple of replacement switch assemblies from KE9PQ; for when the ones I have give out. It appears he still has a few left, so if you are looking to fix the switch on your amp, this may be an option.

I have no interest, financial or otherwise. I'm just trying to keep my Drakes alive :-)

73

- Mark N1VQW

11572. Re: Cinch Jones Connectors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-29 23:49:58 UTC
From: k5fex
Topic: 11548 Message: 11572

Turns out changing pins is quite simple!

on the solder side of the connector, the soldering area has been twisted about 40 degrees. Simply use needle nose pliers to twist the end of the pin to align with the opening in the connector. The pin will now slide out of the connector. Reverse the procedure to install the new pin.

--- In DrakeRadio@yahoogroups.com, "k5fex" wrote:
>
> Anyone ever tried change out a single pin on the power connector on a T4-XC? Have one pin of the 12 that is damaged. Don't want to change the entire connector. Lots of caps and wires!
>

11573. Re: [DrakeRadio] L-4B (and others) Switch assembly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 00:06:57 UTC
From: Abqcooks@...
Topic: 11571 Message: 11573

I just received a switch assembly set from him and it looks like it will
work just fine if ever needed. Thumbs up on that product.

Long as I'm taking up time and space I wonder if anyone has comments on the
shelf life of the old Eimac 3-500Z tubes. I have a set that has been idle in an
old Swan Mark II linear for a long time. Hasn't been powered up for 18 years
due to a fried B+ xfmr in the external Swan power supply deck.
Not that I need to try and use the tubes yet ..... I had long ago decided to just
keep them as spares for a while. Funny how 'a while' turns into 18 years so quickly !
I now wonder if they are really spares or more likely to be a gas arc power supply hazard
if tried
in a working amp ? Just food for a topic. 73 Jim

-----Original Message-----
From: Mark Pilant <n1vqw@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Jan 29, 2013 4:15 pm
Subject: [DrakeRadio] L-4B (and others) Switch assembly

I just purchased a couple of replacement switch assemblies from
E9PQ; for when the ones I have give out. It appears he still
as a few left, so if you are looking to fix the switch on your
mp, this may be an option.
I have no interest, financial or otherwise. I'm just trying to
eep my Drakes alive :-)
73
- Mark N1VQW

[Non-text portions of this message have been removed]

11574. RE: [DrakeRadio] Drake 2-B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 01:36:22 UTC
From: Rich Arland
Topic: 2733 Message: 11574

Rich -

Seems as if your reputation has preceded you here! :-)

Garey:

DO NOT believe a single thing Mikey Bryce, Dino Papas or any of those other guys have to say....In reality I'm far worse!!

God, I love this hobby!!

Rich Arland, K7SZ
Dacula, GA

To: DrakeRadio@yahoogroups.com
From: k4oah@...
Date: Tue, 29 Jan 2013 16:03:38 -0500
Subject: Re: [DrakeRadio] Drake 2-B Restoration

Rich -

Seems as if your reputation has preceded you here! :-)

You might want to check with Tom at Hayseedhamfest.com about a front panel 'overlay' for the 2-B.

He doesn't have one for the 2-B yet, but could be convinced! He's pretty busy making electrolytics,

but I think his Son actuallydoes the panels. They're about 6 mils thick, and just stick on and then

cut out openings with an X-Acto knife. I was concerned about the slide switch openings, but after

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73, Garey - K4OAH

Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

and TR-4/C Service Supplement CDs

[Non-text portions of this message have been removed]

11575. TR 5 ALC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 03:59:39 UTC
From: Woody
Topic: 11575 Message: 11575

Hello, while we're waiting for the storms to arrive tonight late, I'm fooling with my TR5 ALC trying to get the power down to run a Transistor Amp that takes about 22 watts drive (no its not a CB amp) to get 500 out. A friend built me a circuit up to put out up to 12 V neg. I've adjusted it up and down the power will go down to about 50-60 watts out and then just drops out. I can't figure it out, which isn't saying much.
Any help would be appreciated!!!
Thanks
Woody "KO4BG"
*

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[Non-text portions of this message have been removed]

11576. MN-2000 Tuner Swiped in USPS Transit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 05:31:31 UTC
From: mike_ai6ii
Topic: 11576 Message: 11576

I had a strange Drake related experience. I bought a MN-2000 Tuner in very good condition from a ham via qrz.com. He packaged it carefully and sent it USPS. At a weight of 16 pounds the postage was $50. It was around the holidays and took four extra days to arrive having been held up in transit from NJ to Richmond, CA. When the package finally arrived it looked like it had been opened and not very carefully resealed. It felt way too light when I picked it up. The reason? ...it was empty except for the packing material which was all still in the box. But the tuner was gone. How does that happen? The postage stamp was there so it got into the USPS system and it was delivered (and tracked the whole way.) So someone had to have taken the tuner out somewhere in the transit cycle and sent the box on for final delivery (to cover his/her tacks?)

Weird! It was insured so I did not lose any money, but who would have thought such a specialized piece of equipment would be so slyly ripped off? A ham thief in the USPS? Really?

11577. Drake hi

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 07:11:47 UTC
From: Lee Buller
Topic: 11577 Message: 11577

hey have a look http://bit.ly/VTXfh3

Lee

[Non-text portions of this message have been removed]

11578. Re: [DrakeRadio] MN-2000 Tuner Swiped in USPS Transit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 07:47:29 UTC
From: Gary S
Topic: 11576 Message: 11578

Had similar with a delivery from the US to Australia.

Item was several sets of low band vhf cavities, the cost of shipping was greater than the items.

I refused delivery as weight was 500kg short.

Yes, we thought, probably stolen for the metal content.

Turned out that sender "forgot" to pack the units. Shipper showed "in" weight as effectively empty.

Gary
vk2zbb.

>_____
> From: mike_ai6ii <ai6ii@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Wednesday, 30 January 2013 4:31 PM
>Subject: [DrakeRadio] MN-2000 Tuner Swiped in USPS Transit
>
>
>
>I had a strange Drake related experience. I bought a MN-2000 Tuner in very good condition from a ham via qrz.com. He packaged it carefully and sent it USPS. At a weight of 16 pounds the postage was $50. It was around the holidays and took four extra days to arrive having been held up in transit from NJ to Richmond, CA. When the package finally arrived it looked like it had been opened and not very carefully resealed. It felt way too light when I picked it up. The reason? ...it was empty except for the packing material which was all still in the box. But the tuner was gone. How does that happen? The postage stamp was there so it got into the USPS system and it was delivered (and tracked the whole way.) So someone had to have taken the tuner out somewhere in the transit cycle and sent the box on for final delivery (to cover his/her tacks?)
>
>Weird! It was insured so I did not lose any money, but who would have thought such a specialized piece of equipment would be so slyly ripped off? A ham thief in the USPS? Really?
>
>
>
>
>

[Non-text portions of this message have been removed]

11579. Re: [DrakeRadio] MN-2000 Tuner Swiped in USPS Transit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 14:39:07 UTC
From: Keith Evans
Topic: 11576 Message: 11579

Hi Mike,
A friend mine, now sadly SK, in the Cleveland area, had the same thing happen to his Alpha Linear,
When he used them to get the amp to a restorer.

FWIW
73
Keith G3VKW

----- Original Message -----
From: mike_ai6ii
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, January 30, 2013 5:31 AM
Subject: [DrakeRadio] MN-2000 Tuner Swiped in USPS Transit

I had a strange Drake related experience. I bought a MN-2000 Tuner in very good condition from a ham via qrz.com. He packaged it carefully and sent it USPS. At a weight of 16 pounds the postage was $50. It was around the holidays and took four extra days to arrive having been held up in transit from NJ to Richmond, CA. When the package finally arrived it looked like it had been opened and not very carefully resealed. It felt way too light when I picked it up. The reason? ...it was empty except for the packing material which was all still in the box. But the tuner was gone. How does that happen? The postage stamp was there so it got into the USPS system and it was delivered (and tracked the whole way.) So someone had to have taken the tuner out somewhere in the transit cycle and sent the box on for final delivery (to cover his/her tacks?)

Weird! It was insured so I did not lose any money, but who would have thought such a specialized piece of equipment would be so slyly ripped off? A ham thief in the USPS? Really?

[Non-text portions of this message have been removed]

11580. Re: New Member

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 15:32:27 UTC
From: qrper
Topic: 2733 Message: 11580

Now hold on a second, Arland, tis me you're talking to.

If I remember it was three, perhaps five years ago when you cornered me in the hallway at FDIM.

You stood there, rocking on the balls of your feet, telling me with a big grin on your face and looking like a old curious barn cat how you just managed a QSO with a JA7 using the seventieth odd harmonic of a tv color burst crystal. Two diodes, three resistors, a rusty razor blade and a paper clip. You powered the whole shebang using the static build up from two pencil erasers and a furry cat.

I said, "And you expect me to believe that you got a 599 from from that JA7 using just that?"

"Oh hell no," you replied, "His meter was to stingy□I only got a 589."

That's the rich I know...

Mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:
>
>
> OK, you two!!! Lighten up.....I'm an old man!!! Can't pitch the BS like I use to! (IF you believe that one I have a bridge connecting two of New Yorks finest boroughs that has been in the family a while that I'm looking to sell!!)
>
> Hey, Bryce....I'll go out on a limb here and take it for granted you'll be at Dayton/FDIM, correct?? I need some one to ride herd on Papas....he tends to lead me astray!!
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
>
> CC: DrakeRadio@yahoogroups.com
> To: DrakeRadio@yahoogroups.com
> From: prosolar@...
> Date: Mon, 28 Jan 2013 12:05:11 -0500
> Subject: Re: [DrakeRadio] New Member
>
>
>
>

11581. Re: [DrakeRadio] TR 5 ALC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 15:41:03 UTC
From: Chgypsy@...
Topic: 11575 Message: 11581

_ko4bg1@..._ (mailto:ko4bg1@...) writes:

I've adjusted it up and down the power will go down to about 50-60 watts
out and then just
drops out. .Any help would be appreciated!!!
Woody "KO4BG"
Woody, Just as a question have you just fed to a dummy load and tried
adjusting the ALC.? My TR5 comes down to 10 W (or less) for PSK31.
I will mention that key down vs ALC when in a cw mode will give you two
different wattage outputs.
Carl wd8nhk

[Non-text portions of this message have been removed]

11582. FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 15:45:30 UTC
From: Michele
Topic: 11582 Message: 11582

Hello group,
I recently purchased an old FL-500 filter for my R4C. I noted that the insertion loss is quite high, with respect to the standard SSB filter. I tried by monitoring the level of the signal injected by the calibrator, and it goes down quite a bit when I insert the 500 Hz filter; the loss is much lower when I insert the 1.5 kHz filter.
(Yes, I centered the PBT for the maximum signal).
What is your experience on this? Do I have a (too) aged filter ?
73,

Michele IZ2EAS

11583. Re: [DrakeRadio] FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 16:13:20 UTC
From: Garey Barrell
Topic: 11582 Message: 11583

Michele -

What is the serial number of your R-4C?? Later units had a 'T-7C' transformer that increased the
gain when 500 Hz was selected to compensate for the greater insertion loss of the narrower filter.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Michele wrote:
> Hello group,
> I recently purchased an old FL-500 filter for my R4C. I noted that the insertion loss is quite high, with respect to the standard SSB filter. I tried by monitoring the level of the signal injected by the calibrator, and it goes down quite a bit when I insert the 500 Hz filter; the loss is much lower when I insert the 1.5 kHz filter.
> (Yes, I centered the PBT for the maximum signal).
> What is your experience on this? Do I have a (too) aged filter ?
> 73,
>
> Michele IZ2EAS
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11584. Re: [DrakeRadio] FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 16:16:14 UTC
From: Charles Ring
Topic: 11582 Message: 11584

On 1/30/2013 1045, Michele wrote:
>
>
> Hello group,
> I recently purchased an old FL-500 filter for my R4C. I noted that the
> insertion loss is quite high, with respect to the standard SSB filter.
> I tried by monitoring the level of the signal injected by the
> calibrator, and it goes down quite a bit when I insert the 500 Hz
> filter; the loss is much lower when I insert the 1.5 kHz filter.
> (Yes, I centered the PBT for the maximum signal).
> What is your experience on this? Do I have a (too) aged filter ?
> 73,
>
> Michele IZ2EAS
>

On my R-4C there is no significant loss going from the SSB filter to 1.5 KHz, a half S-unit loss at 500 Hz and one S unit with the 250 Hz filter.

Try using DeOxit D100L on the mode/filter switch,and try putting the 500Hz filter in another filter socket on the back panel. Just now I had to jiggle the switch to get a good signal with my 250Hz filter so it's time for DeOxit again.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

11585. Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 17:08:03 UTC
From: Michele
Topic: 11582 Message: 11585

Hello Garey,
the S/N of my R4C is 22516 ....
Thanks,

Michele

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Michele -
>
> What is the serial number of your R-4C?? Later units had a 'T-7C' transformer that increased the
> gain when 500 Hz was selected to compensate for the greater insertion loss of the narrower filter.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Michele wrote:
> > Hello group,
> > I recently purchased an old FL-500 filter for my R4C. I noted that the insertion loss is quite high, with respect to the standard SSB filter. I tried by monitoring the level of the signal injected by the calibrator, and it goes down quite a bit when I insert the 500 Hz filter; the loss is much lower when I insert the 1.5 kHz filter.
> > (Yes, I centered the PBT for the maximum signal).
> > What is your experience on this? Do I have a (too) aged filter ?
> > 73,
> >
> > Michele IZ2EAS
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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>

11586. Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 17:12:18 UTC
From: Michele
Topic: 11582 Message: 11586

Hi Charles,
thanks for your advices; I tried moving the filter to the other free slot, to no avail...
no change; the switch is clean, positive contact with no uncertainty...

Michele

--- In DrakeRadio@yahoogroups.com, Charles Ring wrote:
>
>
> On 1/30/2013 1045, Michele wrote:
> >
> >
> > Hello group,
> > I recently purchased an old FL-500 filter for my R4C. I noted that the
> > insertion loss is quite high, with respect to the standard SSB filter.
> > I tried by monitoring the level of the signal injected by the
> > calibrator, and it goes down quite a bit when I insert the 500 Hz
> > filter; the loss is much lower when I insert the 1.5 kHz filter.
> > (Yes, I centered the PBT for the maximum signal).
> > What is your experience on this? Do I have a (too) aged filter ?
> > 73,
> >
> > Michele IZ2EAS
> >
>
> On my R-4C there is no significant loss going from the SSB filter to 1.5
> KHz, a half S-unit loss at 500 Hz and one S unit with the 250 Hz filter.
>
> Try using DeOxit D100L on the mode/filter switch,and try putting the
> 500Hz filter in another filter socket on the back panel. Just now I had
> to jiggle the switch to get a good signal with my 250Hz filter so it's
> time for DeOxit again.
>
> --
> *Charles Ring W3NU*
>
>
> [Non-text portions of this message have been removed]
>

11587. Questions re: Drake W4 Wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 18:27:31 UTC
From: curtstamp
Topic: 11587 Message: 11587

I have placed two images of my Drake W4 Wattmeter in my photo folder KC9UNL. I bought this item on Ebay and have the manual. What is the additional piece that I think has been added which shows Peak, Ave, Cal Hang?

Any help that you can provide would be very helpful.

Curt KC9UNL

11588. Re: [DrakeRadio] Questions re: Drake W4 Wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 19:09:45 UTC
From: William Houghton
Topic: 11587 Message: 11588

I haven't looked at the photos but there are a couple of aftermarket kits to convert various wattmeters from average reading to peak. I recall that at least one of those was for the Drake W-4 and even had a mounting bracket.

Many peak reading wattmeters use a sample and hold circuit to remember the highest level of rectified RF. This stored dc voltage must be removed to for the next measurement so there is an RC circuit to discharge the stored sample. I suspect the HANG pot controls the discharge rate.

CAL might be an adjustment for the peak reading. Fed with a constant signal amplitude, peak and average should be the same.

My guesses.

From: curtstamp <Curtstamp@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, January 30, 2013 10:27:38 AM
Subject: [DrakeRadio] Questions re: Drake W4 Wattmeter

I have placed two images of my Drake W4 Wattmeter in my photo folder KC9UNL. I bought this item on Ebay and have the manual. What is the additional piece that I think has been added which shows Peak, Ave, Cal Hang?

Any help that you can provide would be very helpful.

Curt KC9UNL

[Non-text portions of this message have been removed]

11589. Re: [DrakeRadio] Questions re: Drake W4 Wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 19:37:08 UTC
From: Jim Wiley
Topic: 11587 Message: 11589

On an associated subject, I am still looking for a spare meter movement for my Drake W4 wattmeter. The meter from a W4, WV4, MN-4, or MN-2000 will do the job. Anyone out there have one?

- Jim, KL7CC

On 1/30/2013 10:09 AM, William Houghton wrote:
>
> I haven't looked at the photos but there are a couple of aftermarket
> kits to
> convert various wattmeters from average reading to peak. I recall that
> at least
> one of those was for the Drake W-4 and even had a mounting bracket.
>
> Many peak reading wattmeters use a sample and hold circuit to remember
> the
> highest level of rectified RF. This stored dc voltage must be removed
> to for the
> next measurement so there is an RC circuit to discharge the stored
> sample. I
> suspect the HANG pot controls the discharge rate.
>
> CAL might be an adjustment for the peak reading. Fed with a constant
> signal
> amplitude, peak and average should be the same.
>
> My guesses.
>
> _
>

[Non-text portions of this message have been removed]

11590. Re: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 19:37:05 UTC
From: Garey Barrell
Topic: 11582 Message: 11590

Michele -

OK. Your receiver almost certainly has a T7, without the tap. Other than a minor inconvenience of
having the S-Meter read low, it has no 'real' effect on the performance of the receiver. There is
more than enough IF gaintomake up for the additional loss in the two lowest bandwidth filters.

Certainly not worth the effort to replace the T7 and associated cables.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Michele wrote:
> Hello Garey,
> the S/N of my R4C is 22516 ....
> Thanks,
>
> Michele
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Michele -
>>
>> What is the serial number of your R-4C?? Later units had a 'T-7C' transformer that increased the
>> gain when 500 Hz was selected to compensate for the greater insertion loss of the narrower filter.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> Michele wrote:
>>> Hello group,
>>> I recently purchased an old FL-500 filter for my R4C. I noted that the insertion loss is quite high, with respect to the standard SSB filter. I tried by monitoring the level of the signal injected by the calibrator, and it goes down quite a bit when I insert the 500 Hz filter; the loss is much lower when I insert the 1.5 kHz filter.

>>> (Yes, I centered the PBT for the maximum signal).
>>> What is your experience on this? Do I have a (too) aged filter ?
>>> 73,
>>>
>>> Michele IZ2EAS
>>>

11591. Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 21:14:42 UTC
From: Michele
Topic: 11582 Message: 11591

Hi Garey,

I looked inside, the transformer is marked T7C..

Michele

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Michele -
>
> OK. Your receiver almost certainly has a T7, without the tap. Other than a minor inconvenience of
> having the S-Meter read low, it has no 'real' effect on the performance of the receiver. There is
> more than enough IF gaintomake up for the additional loss in the two lowest bandwidth filters.
>
> Certainly not worth the effort to replace the T7 and associated cables.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
> >

11592. Re: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 21:29:03 UTC
From: Garey Barrell
Topic: 11582 Message: 11592

Michele -

OK! The changeover was 'almost officiallyaround 23000', so I guessclose enough. :-)

Attached is a Drake supplied modification from my Service Supplement CDfor the C-Line.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Michele wrote:
> Hi Garey,
>
> I looked inside, the transformer is marked T7C..
>
> Michele
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Michele -
>>
>> OK. Your receiver almost certainly has a T7, without the tap. Other than a minor
inconvenience of
>> having the S-Meter read low, it has no 'real' effect on the performance of the receiver.
There is
>> more than enough IF gaintomake up for the additional loss in the two lowest bandwidth
filters.
>>
>> Certainly not worth the effort to replace the T7 and associated cables.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>

[Non-text portions of this message have been removed]

11593. Re: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 22:13:49 UTC
From: Don Cunningham
Topic: 11582 Message: 11593

Garey,
Where is the modification involving T7 on the service CD?? My CD is ver 1.05 and I've (I think) looked everywhere.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11594. Re: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 22:20:31 UTC
From: Garey Barrell
Topic: 11582 Message: 11594

Don -

Should be on there. In the MISC directory.

R-4C T7-C Update Modification.pdf

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
> Where is the modification involving T7 on the service CD?? My CD is ver 1.05 and I've (I think) looked everywhere.
> 73,
> Don, WB5HAK
>

11595. Re: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-30 22:35:47 UTC
From: Don Cunningham
Topic: 11582 Message: 11595

Well, the Misc file is where I looked but I went through it again. There are two folders for T10 and T11, one is a schematic, the other is a photo. Nothing that talks of T7-C Update.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11596. RE: [DrakeRadio] Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 00:41:59 UTC
From: Walter Milton
Topic: 11582 Message: 11596

Garey,

I have Ver-1.02 of your CD and my T4XC/R4C is in the SN#29XXX series. I cannot find the modification on my CD also. I looked all thru the Misc folder. Cam I get a copy of the Modification?

Walt, KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, January 30, 2013 5:21 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: FL-500 insertion loss ?

Don -

Should be on there. In the MISC directory.

R-4C T7-C Update Modification.pdf

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Don Cunningham wrote:
> Garey,
> Where is the modification involving T7 on the service CD?? My CD is ver 1.05 and I've (I think) looked everywhere.
> 73,
> Don, WB5HAK
>

[Non-text portions of this message have been removed]

11597. TR7 PTO Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 03:10:38 UTC
From: aa5wg
Topic: 11597 Message: 11597

Hi to all,

I took the main PTO knob off my TR7 and replaced it with a nicer knob.

Yep, the nicer knob did not work completely. The analog portion of the dial would not spin correctly. It was slipping.

My TR7 has, what it looks like, two female keyway cutouts on the threaded portion of the shaft. There is a rubber like bushing that is fitted over this threaded part of the tuning shaft.

Do all TR7/s have these two cutout keyways on the threaded bushing?

My nicer knob has no male keys to fit into these female keyways and thus I cannot spin the analog portion of the dial.

Are these two female keyways on the threaded bushing normal?

Thank you,

Chuck

11598. Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 04:58:24 UTC
From: Rich Arland
Topic: 11540 Message: 11598

First of all, thanks to the multitude to wrote me and offered help. I love this list!!

One thing that a member of this list imparted to me was the fact that some of the resistors might have changed value. I have encountered this in Hallicrafters and Hammerlund receivers....normally the shift was UPWARD from the indicated value. In several SX-71s I have restored the resistors were over three times the indicated value!

My question: Has anyone run into this on Drake gear, in particular the 2B? I intend to do a fully set of voltage checks, but just wondering about the resistor values changing.

Tnx in advance.....

Rich Arland, K7SZ
Dacula, GA

[Non-text portions of this message have been removed]

11599. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 05:15:43 UTC
From: Richard Knoppow
Topic: 11540 Message: 11599

----- Original Message -----
From: "Rich Arland" <k7sz@...>
To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
Sent: Wednesday, January 30, 2013 8:58 PM
Subject: [DrakeRadio] Drake 2B Restoration

>
> First of all, thanks to the multitude to wrote me and
> offered help. I love this list!!
>
> One thing that a member of this list imparted to me was
> the fact that some of the resistors might have changed
> value. I have encountered this in Hallicrafters and
> Hammerlund receivers....normally the shift was UPWARD from
> the indicated value. In several SX-71s I have restored the
> resistors were over three times the indicated value!
>
> My question: Has anyone run into this on Drake gear, in
> particular the 2B? I intend to do a fully set of voltage
> checks, but just wondering about the resistor values
> changing.
>
> Tnx in advance.....

Not on a 2B because I don't have one but I certainly
have on a T4XB where the cathode resistors of the finals go
high. Some brands seem to be much less stable than others.
The resistors without mold seams seem to be the stable ones,
those with seams to rise in value. The mechanism for the
change in resistance of carbon composition resistors is
fairly well known. The amount of change depends on the mix
of materials used in their construction. I have also
encountered some very high value resistors that went _low_.
Not many and all on the order of 10 meg or so. All were in
very old Hallicrafters receivers.
Carbon comps are always worth checking if there is any
sign of voltages being off. In general small sizes change
more than large sizes and high values change more than low
values. Exposure to heat will make them change value,
usually upward. The best of the bunch were Ohmite and
Allen Bradley. These look enough alike to have come from the
same factory but I don't have anything specific about that.
Modern deposited film resistors are far more stable and,
except for some odd applications, are superior. The ones I
checked on my ancient and honorable Boonton RX meter were

essentially pure resistances up to quite high frequencies.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11600. Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 05:23:45 UTC
From: w7jpg
Topic: 11582 Message: 11600

Hi Garey,
I am a bit confused about the amount of insertion loss that is recouped by T-7C. My SN is 16188 so my set does not have the T7 tranny, correct? That means that when I switch to my 500 or 250 Hz filter, there will be an insertion loss. My rcvr is out of service at the moment so I can't run any tests to post here.
Question 1. For the early SNs, what is the observed insertion loss when switching in these filters? Question 2. How much of this loss did the T7 tranny recoup? OR: what is the observed insertion loss when switching in these filters with T7 in place? After reading the other posts in this thread, I would surmise that the answer to this question would be: "very little" or "no loss" (S-meter reduced readings not relevant). Just want to be sure I "got it right". Question 3: My service disc is version 1.02 and does not have the R-4C T7-C Update Modification.pdf. How do I get my hands on his mod? (just realized this Q was also asked by Walt, KA2NJF)
Thanks,
Chris
W7JPG

-

11601. Re: [DrakeRadio] TR7 PTO Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 05:55:55 UTC
From: Jim Shorney
Topic: 11597 Message: 11601

On Thu, 31 Jan 2013 03:10:38 -0000, aa5wg wrote:

>Are these two female keyways on the threaded bushing normal?

Yes. It is part of the complete dial drive *system*. What you did is akin to putting an import wheel on a Chevy, and then wondering if you need those lug nut thingys.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11602. Re: FL-500 insertion loss ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 06:49:08 UTC
From: Michele
Topic: 11582 Message: 11602

Thanks Garey,
it seems like my R4C is one the firsts with the T7C mods, suffering maybe from the extra loss described in your document; maybe I could use the RG174 coax mod described in there... shall see.
Thanks so much !
73,

Michele

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Michele -
>
> OK! The changeover was 'almost officiallyaround 23000', so I guessclose enough. :-)
>
> Attached is a Drake supplied modification from my Service Supplement CDfor the C-Line.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
>

11603. FF-1 Crystal Specifications

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 02:42:47 UTC
From: Jonathan Reid
Topic: 11603 Message: 11603

I have a FF-1 Fixed Frequency Adapter for a 4-series transceiver.

It has no installed crystals. I'd appreciate advice on two questions:

1. Are the required crystal(s) offset by any amount, or is it designed to simply replace the vfo frequency. In other words if I want, for example, to use one crystal to transceive on 14.070, do I need a 14.070 crystal or some other specification. I cannot find any specifications in manuals.
2. Any recommendations on a source of ctustom crystals from someone with experience with the FF-1?

I appreciate any guidance.

Jonathan Reid, K8JER

[Non-text portions of this message have been removed]

11604. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 14:08:03 UTC
From: Barry
Topic: 11540 Message: 11604

Hi Rich,

I have an Excel spreadsheet with the resistance and voltage values (like the one in the back of the manual). It has room to write your values in for reference (or enter them in Excel and save, etc.). If you want a copy of it, just let me know.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Rich Arland" <k7sz@...>
> To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
> Sent: Wednesday, January 30, 2013 10:58:24 PM
> Subject: [DrakeRadio] Drake 2B Restoration
>
>
> First of all, thanks to the multitude to wrote me and offered help. I
> love this list!!
>
> One thing that a member of this list imparted to me was the fact that
> some of the resistors might have changed value. I have encountered
> this in Hallicrafters and Hammerlund receivers....normally the shift
> was UPWARD from the indicated value. In several SX-71s I have
> restored the resistors were over three times the indicated value!
>
> My question: Has anyone run into this on Drake gear, in particular
> the 2B? I intend to do a fully set of voltage checks, but just
> wondering about the resistor values changing.
>
> Tnx in advance.....
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11605. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 14:34:03 UTC
From: Robert Logan
Topic: 11540 Message: 11605

Barry, could you also send that to me please?

I could adapt that for each rig I have. Would be very handy to have. Cool idea. Thanks.
Bob, NZ5A

Sent from my iPhone

On Jan 31, 2013, at 8:08 AM, Barry <n4buq@...> wrote:

Hi Rich,

I have an Excel spreadsheet with the resistance and voltage values (like the one in the back of the manual). It has room to write your values in for reference (or enter them in Excel and save, etc.). If you want a copy of it, just let me know.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Rich Arland" k7sz@...>
> To: "DrakeGroup@Yahoo" drakeradio@yahoogroups.com>
> Sent: Wednesday, January 30, 2013 10:58:24 PM
> Subject: [DrakeRadio] Drake 2B Restoration
>
>
> First of all, thanks to the multitude to wrote me and offered help. I
> love this list!!
>
> One thing that a member of this list imparted to me was the fact that
> some of the resistors might have changed value. I have encountered
> this in Hallicrafters and Hammerlund receivers....normally the shift
> was UPWARD from the indicated value. In several SX-71s I have
> restored the resistors were over three times the indicated value!
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> My question: Has anyone run into this on Drake gear, in particular
> the 2B? I intend to do a fully set of voltage checks, but just
> wondering about the resistor values changing.
>
> Tnx in advance.....
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11606. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 14:47:53 UTC
From: Barry
Topic: 11540 Message: 11606

BTW, I would upload this to the group site, but apparently I don't have privileges to do that. If someone can do that, I can forward the file.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Barry" <n4buq@...>
> To: DrakeRadio@yahoogroups.com
> Cc: k7sz@...
> Sent: Thursday, January 31, 2013 8:08:03 AM
> Subject: Re: [DrakeRadio] Drake 2B Restoration
>
> Hi Rich,
>
> I have an Excel spreadsheet with the resistance and voltage values
> (like the one in the back of the manual). It has room to write your
> values in for reference (or enter them in Excel and save, etc.). If
> you want a copy of it, just let me know.
>
> Thanks,
> Barry - N4BUQ
>
> ----- Original Message -----
> > From: "Rich Arland" <k7sz@...>
> > To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
> > Sent: Wednesday, January 30, 2013 10:58:24 PM
> > Subject: [DrakeRadio] Drake 2B Restoration
> >
> >
> > First of all, thanks to the multitude to wrote me and offered help.
> > I
> > love this list!!
> >
> > One thing that a member of this list imparted to me was the fact
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> > some of the resistors might have changed value. I have encountered
> > this in Hallicrafters and Hammerlund receivers....normally the
> > shift
> > was UPWARD from the indicated value. In several SX-71s I have
> > restored the resistors were over three times the indicated value!
> >
> > My question: Has anyone run into this on Drake gear, in particular
> > the 2B? I intend to do a fully set of voltage checks, but just
> > wondering about the resistor values changing.

> >
> > Tnx in advance.....
> >
> >
> > Rich Arland, K7SZ
> > Dacula, GA
> >
> >
> > [Non-text portions of this message have been removed]
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11607. Re: [DrakeRadio] FF-1 Crystal Specifications

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:02:40 UTC
From: Garey Barrell
Topic: 11603 Message: 11607

Jonathan -

The FF-1 crystals ARE offset. The oscillator in the FF-1 merely replaces the PTO output, so the
crystal frequency for SSB will be the BAND crystal frequency - desired output frequency, e.g., there
is no 20M BAND crystal, so the crystal would be 14.070 - 9 MHz = 5.07 MHz. For 40M the BAND crystal
is 12.5 MHz - 7.070 = 5.43 MHz crystal frequency. For CW you must subtract another 1 kHz, = 5.429
MHz. EXCEPT on 80M, where you must ADD 1 kHz to the crystal frequencyfor CW.

I would recommend International Crystal Mfg. They have all information necessary to make crystals
for ANY Drake equipment. <ICMFG.com>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jonathan Reid wrote:
> I have a FF-1 Fixed Frequency Adapter for a 4-series transceiver.
>
> It has no installed crystals. I'd appreciate advice on two questions:
>
> 1. Are the required crystal(s) offset by any amount, or is it designed to
> simply replace the vfo frequency. In other words if I want, for example,
> to use one crystal to transceive on 14.070, do I need a 14.070 crystal or
> some other specification. I cannot find any specifications in manuals.
> 2. Any recommendations on a source of ctustom crystals from someone with
> experience with the FF-1?
>
> I appreciate any guidance.
>
> Jonathan Reid, K8JER
>

11608. Re: [DrakeRadio] TR7 PTO Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:04:13 UTC
From: Garey Barrell
Topic: 11597 Message: 11608

Jim Shorney wrote:
> On Thu, 31 Jan 2013 03:10:38 -0000, aa5wg wrote:
>
>> Are these two female keyways on the threaded bushing normal?
>
> Yes. It is part of the complete dial drive *system*. What you did is akin to
> putting an import wheel on a Chevy, and then wondering if you need those lug
> nut thingys.
>
>
:-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

11609. Re: [DrakeRadio] FF-1 Crystal Specifications

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:14:11 UTC
From: Jonathan Reid
Topic: 11603 Message: 11609

THANK YOU! Precisely what I needed!

On Thu, Jan 31, 2013 at 10:02 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Jonathan -
>
> The FF-1 crystals ARE offset. The oscillator in the FF-1 merely replaces
> the PTO output, so the
> crystal frequency for SSB will be the BAND crystal frequency - desired
> output frequency, e.g., there
> is no 20M BAND crystal, so the crystal would be 14.070 - 9 MHz = 5.07 MHz.
> For 40M the BAND crystal
> is 12.5 MHz - 7.070 = 5.43 MHz crystal frequency. For CW you must subtract
> another 1 kHz, = 5.429
> MHz. EXCEPT on 80M, where you must ADD 1 kHz to the crystal frequencyfor
> CW.
>
> I would recommend International Crystal Mfg. They have all information
> necessary to make crystals
> for ANY Drake equipment.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
>
> Jonathan Reid wrote:
> > I have a FF-1 Fixed Frequency Adapter for a 4-series transceiver.
> >
> > It has no installed crystals. I'd appreciate advice on two questions:
> >
> > 1. Are the required crystal(s) offset by any amount, or is it designed to
> > simply replace the vfo frequency. In other words if I want, for example,
> > to use one crystal to transceive on 14.070, do I need a 14.070 crystal or
> > some other specification. I cannot find any specifications in manuals.
> > 2. Any recommendations on a source of ctustom crystals from someone with
> > experience with the FF-1?
> >
> > I appreciate any guidance.

> >
> > Jonathan Reid, K8JER
> >
>
>
>

[Non-text portions of this message have been removed]

11610. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:20:13 UTC
From: Don Cunningham
Topic: 11540 Message: 11610

I hope that you get permission to upload that file, Barry. I too would like to have it for my 2B.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11611. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:21:34 UTC
From: Garey Barrell
Topic: 11540 Message: 11611

Barry -

I don't know why you can't upload to FILES. Send me your file and I'll put it up and check your status.

One caveat with Drake Voltage and Resistance charts. The are usually pretty close for the first
version. In more than a few cases, I have found that while the schematic was changed the V and R
charts were NOT. So take those readings with a grain of salt. If one is off, examine the schematic
andsee if the reading 'makes sense'.

There are other problems, some due to using a modern DMM rather than the 11M input impedance VTVM
(Heathkit) used by Drake. The 1M resistor at the VTVM probe tip is critical when measuring oscillator or converter grids. A DMM lead, which doesNOT have the resistor, will kill the oscillator, changing the reading considerably. Another problem with the Resistance charts, especially for those readings that go back through the power supply bus, is the polarity of the
ohmmeter. Again, the VTVM is pretty repeatable as you normally work with one lead clipped to
chassis, the ohmmeter circuits all seem to have the same polarity and voltage. So ifone of those
readings is off, try reversing the polarity of the meter leads.

Other than that, they're fine! :-) I don't use either, finding it easier to look at the schematic
to see if a voltage reading 'makes sense'. The resistance readings are rarely consistent, and you
might have three resistors in a series path. If you are concerned about resistors, you're much
better served to just go measure each one. Actually, I don't think I have ever found an out of
tolerance resistor in 2 or 4 series radios that wasn't burnedor otherwise damaged. I know some of
the manufacturers used less reliable resistors, one in particular that had a 'bumpy' surface and
another that had a clear'beltline' where the halves were glued(?) together. Drake used Allen-Bradley, which were the highest quality carbon comp resistors made.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

<www.k4oah.com>

Barry wrote:
> BTW, I would upload this to the group site, but apparently I don't have privileges to do that. If someone can do that, I can forward the file.
>
> Thanks,
> Barry - N4BUQ
>
> ----- Original Message -----
>> From: "Barry" <n4buq@...>
>> To: DrakeRadio@yahoogroups.com
>> Cc: k7sz@...
>> Sent: Thursday, January 31, 2013 8:08:03 AM
>> Subject: Re: [DrakeRadio] Drake 2B Restoration
>>
>> Hi Rich,
>>
>> I have an Excel spreadsheet with the resistance and voltage values
>> (like the one in the back of the manual). It has room to write your
>> values in for reference (or enter them in Excel and save, etc.). If
>> you want a copy of it, just let me know.
>>
>> Thanks,
>> Barry - N4BUQ
>>
>> ----- Original Message -----
>>> From: "Rich Arland" <k7sz@...>
>>> To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
>>> Sent: Wednesday, January 30, 2013 10:58:24 PM
>>> Subject: [DrakeRadio] Drake 2B Restoration
>>>
>>>
>>> First of all, thanks to the multitude to wrote me and offered help.
>>> I
>>> love this list!!
>>>
>>> One thing that a member of this list imparted to me was the fact
>>> that
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>>> this in Hallicrafters and Hammerlund receivers....normally the
>>> shift
>>> was UPWARD from the indicated value. In several SX-71s I have
>>> restored the resistors were over three times the indicated value!
>>>
>>> My question: Has anyone run into this on Drake gear, in particular
>>> the 2B? I intend to do a fully set of voltage checks, but just
>>> wondering about the resistor values changing.
>>>
>>> Tnx in advance.....

>>>
>>>
>>> Rich Arland, K7SZ
>>> Dacula, GA
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>>> [Non-text portions of this message have been removed]
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11612. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 15:35:13 UTC
From: Barry
Topic: 11540 Message: 11612

Garey,

I sent the file to you. It should be just a copy of the values from the back of the manual I have. It isn't anything very fancy. I just wanted something I could write on (or enter the values and highlight the ones that needed further examination, etc.) and print/reprint as I wanted.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, January 31, 2013 9:21:34 AM
> Subject: Re: [DrakeRadio] Drake 2B Restoration
>
> Barry -
>
> I don't know why you can't upload to FILES. Send me your file and
> I'll put it up and check your status.
>
> One caveat with Drake Voltage and Resistance charts. The are usually
> pretty close for the first
> version. In more than a few cases, I have found that while the
> schematic was changed the V and R
> charts were NOT. So take those readings with a grain of salt. If
> one is off, examine the schematic
> andsee if the reading 'makes sense'.
>
> There are other problems, some due to using a modern DMM rather than
> the 11M input impedance VTVM
> (Heathkit) used by Drake. The 1M resistor at the VTVM probe tip is
> critical when measuring
> oscillator or converter grids. A DMM lead, which doesNOT have the
> resistor, will kill the
> oscillator, changing the reading considerably. Another problem with
> the Resistance charts,
> especially for those readings that go back through the power supply
> bus, is the polarity of the
> ohmmeter. Again, the VTVM is pretty repeatable as you normally work
> with one lead clipped to
> chassis, the ohmmeter circuits all seem to have the same polarity and
> voltage. So ifone of those
> readings is off, try reversing the polarity of the meter leads.
>
> Other than that, they're fine! :-) I don't use either, finding it

> easier to look at the schematic
> to see if a voltage reading 'makes sense'. The resistance readings
> are rarely consistent, and you
> might have three resistors in a series path. If you are concerned
> about resistors, you're much
> better served to just go measure each one. Actually, I don't think I
> have ever found an out of
> tolerance resistor in 2 or 4 series radios that wasn't burnedor
> otherwise damaged. I know some of
> the manufacturers used less reliable resistors, one in particular
> that had a 'bumpy' surface and
> another that had a clear'beltline' where the halves were glued(?)
> together. Drake used
> Allen-Bradley, which were the highest quality carbon comp resistors
> made.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Barry wrote:
> > BTW, I would upload this to the group site, but apparently I don't
> > have privileges to do that. If someone can do that, I can forward
> > the file.
> >
> > Thanks,
> > Barry - N4BUQ
> >
> > ----- Original Message -----
> >> From: "Barry" <n4buq@...>
> >> To: DrakeRadio@yahoogroups.com
> >> Cc: k7sz@...
> >> Sent: Thursday, January 31, 2013 8:08:03 AM
> >> Subject: Re: [DrakeRadio] Drake 2B Restoration
> >>
> >> Hi Rich,
> >>
> >> I have an Excel spreadsheet with the resistance and voltage values
> >> (like the one in the back of the manual). It has room to write
> >> your
> >> values in for reference (or enter them in Excel and save, etc.).
> >> If
> >> you want a copy of it, just let me know.
> >>
> >> Thanks,
> >> Barry - N4BUQ
> >>

> >> ----- Original Message -----
> >>> From: "Rich Arland" <k7sz@...>
> >>> To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
> >>> Sent: Wednesday, January 30, 2013 10:58:24 PM
> >>> Subject: [DrakeRadio] Drake 2B Restoration
> >>>
> >>>
> >>> First of all, thanks to the multitude to wrote me and offered
> >>> help.
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> >>> love this list!!
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> >>> One thing that a member of this list imparted to me was the fact
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> >>>
> >>> Tnx in advance.....
> >>>
> >>>
> >>> Rich Arland, K7SZ
> >>> Dacula, GA
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11613. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 16:36:17 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 11613

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /Drake2BVoltageResistance.xls
Uploaded by : k4oah <k4oah@...>
Description : Drake V & R Charts for 2-B

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/Drake2BVoltageResistance.xls

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

k4oah <k4oah@...>

11614. Re: [DrakeRadio] TR7 PTO Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 17:31:57 UTC
From: Chuck Pool
Topic: 11597 Message: 11614

Garey - K4OAH,

Thank you.

Chuck - AA5WG

From: Garey Barrell <k4oah@...>
To: DrakeRadio@...m
Sent: Thursday, January 31, 2013 10:04 AM
Subject: Re: [DrakeRadio] TR7 PTO Tuning Knob

Jim Shorney wrote:
> On Thu, 31 Jan 2013 03:10:38 -0000, aa5wg wrote:
>
>> Are these two female keyways on the threaded bushing normal?
>
> Yes. It is part of the complete dial drive *system*. What you did is akin to
> putting an import wheel on a Chevy, and then wondering if you need those lug
> nut thingys.
>
>
:-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

[Non-text portions of this message have been removed]

11615. Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 17:39:02 UTC
From: Kihwal Lee
Topic: 11615 Message: 11615

I thought $400 AC-4 was bad until I saw this.

http://r.ebay.com/RzIxEf

Kihwal, K9SUL

11616. Re: [DrakeRadio] TR7 PTO Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 17:47:01 UTC
From: Garey Barrell
Topic: 11597 Message: 11616

Chuck -

You're welcome, I guess! :-) I was commenting on Jim's analogy rather than the problem itself.

The back of the knob MUST be flat right down to the 1/4" hole, with a small tab extending to engage
the slot in the brass sleeve. This is accomplished by the dished kHz dial skirt on the original knob.

The drive system operates by compressing the rubber 'doughnut' to cause friction on the brass
sleeve. The tab allows the brass sleeve (which drives the dial, to be held in position while turning
the knob to 'register' the dial to '0'.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chuck Pool wrote:
> Garey - K4OAH,
>
> Thank you.
>
> Chuck - AA5WG
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, January 31, 2013 10:04 AM
> Subject: Re: [DrakeRadio] TR7 PTO Tuning Knob
>
>
>
> Jim Shorney wrote:
>> On Thu, 31 Jan 2013 03:10:38 -0000, aa5wg wrote:
>>
>>> Are these two female keyways on the threaded bushing normal?
>> Yes. It is part of the complete dial drive *system*. What you did is akin to
>> putting an import wheel on a Chevy, and then wondering if you need those lug
>> nut thingys.

>>
>>
> :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>

11617. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 18:35:08 UTC
From: Mike
Topic: 11615 Message: 11617

Whoa!!!!!

At least he didn't ask that the 3.5% PayPal fees be paid extra.

Mike wb8vge

Sent from my iPhone

On Jan 31, 2013, at 12:39 PM, Kihwal Lee <kihwal@...> wrote:

> I thought $400 AC-4 was bad until I saw this.
>
> http://r.ebay.com/RzIxEf
>
> Kihwal, K9SUL
>
>

[Non-text portions of this message have been removed]

11618. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 19:23:27 UTC
From: Bernie
Topic: 11615 Message: 11618

I just HAD to bookmark that one to see if I'm correct in betting he will get ZERO bids. I wonder if there is 'medical marijuana' involved in his decision-making!

Bernie in ND
WD0GMD
----- Original Message -----
From: Kihwal Lee
To: drakeradio@yahoogroups.com
Sent: Thursday, January 31, 2013 11:39 AM
Subject: [DrakeRadio] Another amazing ebay price

I thought $400 AC-4 was bad until I saw this.

http://r.ebay.com/RzIxEf

Kihwal, K9SUL

[Non-text portions of this message have been removed]

11619. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 19:32:32 UTC
From: Barry
Topic: 11615 Message: 11619

I just have to assume he inadvertently entered three more zeroes than he intended.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Bernie" <barcand@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, January 31, 2013 1:23:27 PM
> Subject: Re: [DrakeRadio] Another amazing ebay price
>
> I just HAD to bookmark that one to see if I'm correct in betting he
> will get ZERO bids. I wonder if there is 'medical marijuana'
> involved in his decision-making!
>
> Bernie in ND
> WD0GMD
> ----- Original Message -----
> From: Kihwal Lee
> To: drakeradio@yahoogroups.com
> Sent: Thursday, January 31, 2013 11:39 AM
> Subject: [DrakeRadio] Another amazing ebay price
>
>
>
> I thought $400 AC-4 was bad until I saw this.
>
> http://r.ebay.com/RzIxEf
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> Kihwal, K9SUL
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11620. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 19:55:01 UTC
From: Larry
Topic: 11615 Message: 11620

I wouldn't give him a cent over $90,000!!

Larry W4LK

On 01/31/2013 02:32 PM, Barry wrote:
>
> I just have to assume he inadvertently entered three more zeroes than
> he intended.
>
> Thanks,
> Barry - N4BUQ
>
> ----- Original Message -----
> > From: "Bernie" barcand@... <mailto:barcand%40nccray.com>>
> > To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> > Sent: Thursday, January 31, 2013 1:23:27 PM
> > Subject: Re: [DrakeRadio] Another amazing ebay price
> >
> > I just HAD to bookmark that one to see if I'm correct in betting he
> > will get ZERO bids. I wonder if there is 'medical marijuana'
> > involved in his decision-making!
> >
> > Bernie in ND
> > WD0GMD
> > ----- Original Message -----
> > From: Kihwal Lee
> > To: drakeradio@yahoogroups.com <mailto:drakeradio%40yahoogroups.com>
> > Sent: Thursday, January 31, 2013 11:39 AM
> > Subject: [DrakeRadio] Another amazing ebay price
> >
> >
> >
> > I thought $400 AC-4 was bad until I saw this.
> >
> > http://r.ebay.com/RzIxEf
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> > Kihwal, K9SUL
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[Non-text portions of this message have been removed]

11621. RE: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 21:00:40 UTC
From: Ian Reeve
Topic: 11615 Message: 11621

I think I am right but do stand to be corrected, these are the RCA AR88 or it certainly looks the same.
I bought a very nice AR88 in full working order (gosh they are heavy!) but the case was scruffy.
Came with a spare set of tubes and a replacement perspex meter / dial panel.
Sold it, completely untouched from the condition it was when I bought it for over twice what I paid.
It was working but will need a little attention to bring it up to spec.
A lovely old receiver if you have the space, but not at that price, far far too much.

Ian

Ian Reeve M?IDR

To: drakeradio@yahoogroups.com
From: kihwal@...
Date: Thu, 31 Jan 2013 09:39:02 -0800
Subject: [DrakeRadio] Another amazing ebay price

I thought $400 AC-4 was bad until I saw this.

http://r.ebay.com/RzIxEf

Kihwal, K9SUL

[Non-text portions of this message have been removed]

11622. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 21:06:11 UTC
From: Steve Wedge
Topic: 11615 Message: 11622

You'd think for 100 grand that he could afford a proofreader :)

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jan 31, 2013, at 12:39 PM, Kihwal Lee <kihwal@...> wrote:

> I thought $400 AC-4 was bad until I saw this.
>
> http://r.ebay.com/RzIxEf
>
> Kihwal, K9SUL
>
>

[Non-text portions of this message have been removed]

11623. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-01-31 21:50:09 UTC
From: john
Topic: 11615 Message: 11623

I'll sell you mine for 70% off! Free delivery!

John K5MO

At 12:39 PM 1/31/2013, Kihwal Lee wrote:
>I thought $400 AC-4 was bad until I saw this.
>
>http://r.ebay.com/RzIxEf
>
>Kihwal, K9SUL
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11624. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 01:16:40 UTC
From: Robert Logan
Topic: 11615 Message: 11624

Is that the venerable AR-88 receiver? Bob, NZ5A

Sent from my iPhone

On Jan 31, 2013, at 3:50 PM, john <johnmb@...> wrote:

I'll sell you mine for 70% off! Free delivery!

John K5MO

At 12:39 PM 1/31/2013, Kihwal Lee wrote:
>I thought $400 AC-4 was bad until I saw this.
>
>http://r.ebay.com/RzIxEf
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>Kihwal, K9SUL
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[Non-text portions of this message have been removed]

11625. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 02:12:19 UTC
From: john
Topic: 11615 Message: 11625

It is indeed!

John K5MO

At 08:16 PM 1/31/2013, Robert Logan wrote:
>Is that the venerable AR-88 receiver? Bob, NZ5A
>
>Sent from my iPhone
>
>On Jan 31, 2013, at 3:50 PM, john <johnmb@...> wrote:
>
>
>I'll sell you mine for 70% off! Free delivery!
>
>John K5MO
>
>At 12:39 PM 1/31/2013, Kihwal Lee wrote:
> >I thought $400 AC-4 was bad until I saw this.
> >
> >http://r.ebay.com/RzIxEf
> >
> >Kihwal, K9SUL
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11626. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 15:18:02 UTC
From: Robert Logan
Topic: 11615 Message: 11626

I had one in my early days, traded a CE 20A for it. What a price!

Sent from my iPhone

On Jan 31, 2013, at 8:12 PM, john <johnmb@...> wrote:

It is indeed!

John K5MO

At 08:16 PM 1/31/2013, Robert Logan wrote:
>Is that the venerable AR-88 receiver? Bob, NZ5A
>
>Sent from my iPhone
>
>On Jan 31, 2013, at 3:50 PM, john johnmb@...> wrote:
>
>
>I'll sell you mine for 70% off! Free delivery!
>
>John K5MO
>
>At 12:39 PM 1/31/2013, Kihwal Lee wrote:
> >I thought $400 AC-4 was bad until I saw this.
> >
> >http://r.ebay.com/RzIxEf
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> >Kihwal, K9SUL
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11627. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 17:30:28 UTC
From: Richard Knoppow
Topic: 11615 Message: 11627

----- Original Message -----
From: "Ian Reeve" <ian.radioworkshop@...>
To: <drakeradio@yahoogroups.com>
Sent: Thursday, January 31, 2013 1:00 PM
Subject: RE: [DrakeRadio] Another amazing ebay price

I think I am right but do stand to be corrected, these are
the RCA AR88 or it certainly looks the same.
I bought a very nice AR88 in full working order (gosh they
are heavy!) but the case was scruffy.
Came with a spare set of tubes and a replacement perspex
meter / dial panel.
Sold it, completely untouched from the condition it was when
I bought it for over twice what I paid.
It was working but will need a little attention to bring it
up to spec.
A lovely old receiver if you have the space, but not at that
price, far far too much.

Ian

Its a CR-91, which is a later version of the AR-88. The
main difference is that a control for the crystal phasing
capacitor is brought out to the front panel. For some reason
RCA failed to do this in the AR-88 even though they did in
the earlier AR-77. This receiver was built by RCA in
Canada, perhaps for the Canadian Air Force, who used many of
them. Camden was overloaded at the time. It is NOT a double
conversion receiver as stated in the ad. I strongly suspect
the price is a mis-print.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

Ian Reeve M?IDR

To: drakeradio@yahoogroups.com
From: kihwal@...
Date: Thu, 31 Jan 2013 09:39:02 -0800
Subject: [DrakeRadio] Another amazing ebay price

I thought $400 AC-4 was bad until I saw this.

http://r.ebay.com/RzIxEf

Kihwal, K9SUL

[Non-text portions of this message have been removed]

Yahoo! Groups Links

11628. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 17:39:04 UTC
From: Richard Knoppow
Topic: 11615 Message: 11628

----- Original Message -----
From: "Ian Reeve" <ian.radioworkshop@...>
To: <drakeradio@yahoogroups.com>
Sent: Thursday, January 31, 2013 1:00 PM
Subject: RE: [DrakeRadio] Another amazing ebay price

I think I am right but do stand to be corrected, these are
the RCA AR88 or it certainly looks the same.
I bought a very nice AR88 in full working order (gosh they
are heavy!) but the case was scruffy.
Came with a spare set of tubes and a replacement perspex
meter / dial panel.
Sold it, completely untouched from the condition it was when
I bought it for over twice what I paid.
It was working but will need a little attention to bring it
up to spec.
A lovely old receiver if you have the space, but not at that
price, far far too much.

Ian

Correction, the CR-91 is the LF version of the
AR/CR-88. The statement about the crystal phasing control is
correct, it is present on the CR-88 (normal frequency
coverage) and the CR-91, which had two LF bands in place of
the broadcast and second band of the standard receiver. The
circuits are essentially identical. The CR-91 and AR-88LF
have 735 khz IF which may have been what mislead the seller
into thinking its a double conversion receiver.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11629. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 17:50:39 UTC
From: Richard Knoppow
Topic: 11615 Message: 11629

----- Original Message -----
From: "Ian Reeve" <ian.radioworkshop@...>
To: <drakeradio@yahoogroups.com>
Sent: Thursday, January 31, 2013 1:00 PM
Subject: RE: [DrakeRadio] Another amazing ebay price

I sent the seller a note about the price and the wrong
description. We will see...

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11630. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 18:25:29 UTC
From: Dan Galligan
Topic: 11615 Message: 11630

Dick,
Likely, you will get a vicious reply, telling you to mind your own business. Unfortunately, folks who overprice things, like this item, 'think' they are sitting on a gold mine, and will take no advice, regardless how helpful, it is.
There is something that seems to make them very defensive, and I don't get it. The couple of times that I overpriced things, accidentally, (because I didn't do my research, properly), I was grateful, for the advice. Too bad that more folks don't feel that way.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 1, 2013, at 9:50 AM, Richard Knoppow <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Ian Reeve" <ian.radioworkshop@...>
> To: <drakeradio@yahoogroups.com>
> Sent: Thursday, January 31, 2013 1:00 PM
> Subject: RE: [DrakeRadio] Another amazing ebay price
>
> I sent the seller a note about the price and the wrong
> description. We will see...
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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[Non-text portions of this message have been removed]

11631. Re: Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 20:50:13 UTC
From: Chris Kepus
Topic: 11615 Message: 11631

I think he's trying to flush out John (MO) who is reportedly sitting on a stash of old cars and radios worth far more than the piddling price he's asking.

If that sounds like a stretch, maybe the motivation for pricing it that way is to achieve notoriety by getting on the eBay news flash for having the most spendy radio ever advertised????

OTOH, since he is OK to ship International, I suspect there are a few prospective buyers in Dubai.

Wouldn't we all have a lot more to ponder if the damn thing sold for that price? Hee Hee

Not bidding,

Chris

W7JPG

[Non-text portions of this message have been removed]

11632. RE: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 21:02:49 UTC
From: Ian Reeve
Topic: 11615 Message: 11632

Hi Richard,

Thank you very much for the info re the AR88, CR91 and the AR77, I have owned both a 77E, a lovely receiver and of course the 88 is regarded as a classic.The 77 was in poor condition but I eventually got it working well to near spec and sold it on whilst it still worked. The 88 was tatty case wise but the electronics were OK and untouched and original and needed a little tweak here and there but nothing more!

Fabulous receivers, the AR88 were used at Bletchley Park and they still run them today for visitors to experience what real radio is about!

Needed some space so sold the 88, infact it went so quickly that I had to pinch myself to make sure I wasn't seeing things.

73

Ian from
Evesham in the
UK

Ian Reeve MØIDR

> To: DrakeRadio@yahoogroups.com
> From: 1oldlens1@...
> Date: Fri, 1 Feb 2013 09:30:28 -0800
> Subject: Re: [DrakeRadio] Another amazing ebay price
>
>
> ----- Original Message -----
> From: "Ian Reeve" <ian.radioworkshop@...>
> To: <drakeradio@yahoogroups.com>
> Sent: Thursday, January 31, 2013 1:00 PM
> Subject: RE: [DrakeRadio] Another amazing ebay price
>
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>
> I think I am right but do stand to be corrected, these are
> the RCA AR88 or it certainly looks the same.
> I bought a very nice AR88 in full working order (gosh they
> are heavy!) but the case was scruffy.
> Came with a spare set of tubes and a replacement perspex
> meter / dial panel.
> Sold it, completely untouched from the condition it was when
> I bought it for over twice what I paid.
> It was working but will need a little attention to bring it
> up to spec.
> A lovely old receiver if you have the space, but not at that

> price, far far too much.
>
> Ian
>
>
> Its a CR-91, which is a later version of the AR-88. The
> main difference is that a control for the crystal phasing
> capacitor is brought out to the front panel. For some reason
> RCA failed to do this in the AR-88 even though they did in
> the earlier AR-77. This receiver was built by RCA in
> Canada, perhaps for the Canadian Air Force, who used many of
> them. Camden was overloaded at the time. It is NOT a double
> conversion receiver as stated in the ad. I strongly suspect
> the price is a mis-print.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...om.com
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> Ian Reeve MØIDR
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> To: drakeradio@yahoogroups.com
> From: kihwal@...
> Date: Thu, 31 Jan 2013 09:39:02 -0800
> Subject: [DrakeRadio] Another amazing ebay price
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> I thought $400 AC-4 was bad until I saw this.
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[Non-text portions of this message have been removed]

11633. Re: [DrakeRadio] Re: Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 21:14:06 UTC
From: Dan Galligan
Topic: 11615 Message: 11633

Well, there are times I think it's all about notoriety. They are looking for their item to show up on Jay Leno's "eBay, did it sell?" segment.
A few years ago, some friends of mine and I, had a small contest, to see who could sell the least valuable item, for the most amount of money. I went to my local (SoCal folks will know this) In-N-Out Burger, and got one of their free window stickers. I then put it on eBay, auction style, and it sold for over $5, plus shipping, of whatever a postage stamp and envelope cost, at the time. I wasn't trying to cheat anyone, but wound up amazed that it sold to a guy, that according to his mailing address, lived less than a mile, from an In-N-Out Burger, where he could have gotten a stack of them for free.
As it turned out, my sticker sale, (was never the intent) wound up on the Leno show. So, I firmly think that this is frequently the motivation. They don't care if it sells, if they get their minute of fame. It's what I call, Jerry Springer Syndrome. Do anything, to get on TV. Regardless, how foolish one looks.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash. iPad

[Non-text portions of this message have been removed]

11634. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 21:27:18 UTC
From: Richard Knoppow
Topic: 11615 Message: 11634

----- Original Message -----
From: "Ian Reeve" <ian.radioworkshop@...>
To: <drakeradio@yahoogroups.com>
Sent: Friday, February 01, 2013 1:02 PM
Subject: RE: [DrakeRadio] Another amazing ebay price

Hi Richard,

Thank you very much for the info re the AR88, CR91 and the AR77, I have owned both a 77E, a lovely receiver and of course the 88 is regarded as a classic.The 77 was in poor condition but I eventually got it working well to near spec and sold it on whilst it still worked.
The 88 was tatty case wise but the electronics were OK and untouched and original and needed a little tweak here and there but nothing more!

Fabulous receivers, the AR88 were used at Bletchley Park and they still run them today for visitors to experience what real radio is about!

Needed some space so sold the 88, infact it went so quickly that I had to pinch myself to make sure I wasn't seeing things.

73

Ian from
Evesham in the
UK

I've more or less finished restoring an AR-88F. The F is a version used in the DR-98 diversity system. Essentially the same as the AR-88D with a very few minor changes. Mine was originally U.S. Navy surplus but had a difficult life. Very dirty and the dial window was broken in were the type label goes (meter blank). I was able to get all the parts and rebuilt it. I was also lucky enough to find an original meter which I installed. I have two bad antenna stage coils which I would like to replace. Evidently someone ran a transmitter into them. I made them work but would like to replace them.
The AR-88 is an amazing receiver, very stable and very good performance. The rack mount chassis weighs 80 lbs, in the desk cabinet it comes in at an even 100 lbs. I've had girl friends who weighed less. I've learned a tremendous amount about these receivers from working on this one.

There are more in Europe, Canada, and England than here because most were supplied as part of lend-lease and for military purposes. Evidently RCA built a version as late as the mid-1950s.
I have only ever seen one AR-77. I would like to get one someday because I am curious about the design. They are very similar in some ways to the Hammarlund HQ-120-X or rather to the later HQ-129-X.
The AR-88 was designed by a different team. It was supposed to be a cost no object design and may have cost $1000 when new!

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11635. Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 22:31:44 UTC
From: Steve Wedge
Topic: 11615 Message: 11635

Eh, wot? Doesn't look like it's sold to me...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Ian Reeve
Sent: Friday, February 01, 2013 4:02 PM
To: drakeradio@yahoogroups.com
Subject: RE: [DrakeRadio] Another amazing ebay price

Hi Richard,

Thank you very much for the info re the AR88, CR91 and the AR77, I have owned both a 77E, a lovely receiver and of course the 88 is regarded as a classic.The 77 was in poor condition but I eventually got it working well to near spec and sold it on whilst it still worked. The 88 was tatty case wise but the electronics were OK and untouched and original and needed a little tweak here and there but nothing more!

Fabulous receivers, the AR88 were used at Bletchley Park and they still run them today for visitors to experience what real radio is about!

Needed some space so sold the 88, infact it went so quickly that I had to pinch myself to make sure I wasn't seeing things.

73

Ian from
Evesham in the
UK

Ian Reeve MØIDR

> To: DrakeRadio@yahoogroups.com
> From: 1oldlens1@...
> Date: Fri, 1 Feb 2013 09:30:28 -0800
> Subject: Re: [DrakeRadio] Another amazing ebay price
>
>
> ----- Original Message -----
> From: "Ian Reeve" ian.radioworkshop@....uk>
> To: drakeradio@yahoogroups.com>
> Sent: Thursday, January 31, 2013 1:00 PM
> Subject: RE: [DrakeRadio] Another amazing ebay price
>
>

>
> I think I am right but do stand to be corrected, these are
> the RCA AR88 or it certainly looks the same.
> I bought a very nice AR88 in full working order (gosh they
> are heavy!) but the case was scruffy.
> Came with a spare set of tubes and a replacement perspex
> meter / dial panel.
> Sold it, completely untouched from the condition it was when
> I bought it for over twice what I paid.
> It was working but will need a little attention to bring it
> up to spec.
> A lovely old receiver if you have the space, but not at that
> price, far far too much.
>
> Ian
>
>
> Its a CR-91, which is a later version of the AR-88. The
> main difference is that a control for the crystal phasing
> capacitor is brought out to the front panel. For some reason
> RCA failed to do this in the AR-88 even though they did in
> the earlier AR-77. This receiver was built by RCA in
> Canada, perhaps for the Canadian Air Force, who used many of
> them. Camden was overloaded at the time. It is NOT a double
> conversion receiver as stated in the ad. I strongly suspect
> the price is a mis-print.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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> Ian Reeve MØIDR
>
>
> To: drakeradio@yahoogroups.com
> From: kihwal@...
> Date: Thu, 31 Jan 2013 09:39:02 -0800
> Subject: [DrakeRadio] Another amazing ebay price
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> I thought $400 AC-4 was bad until I saw this.
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> http://r.ebay.com/RzIxEf
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> Kihwal, K9SUL
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> [Non-text portions of this message have been removed]

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11636. Re: [DrakeRadio] Re: Another amazing eBay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-01 22:40:04 UTC
From: Steve Wedge
Topic: 11615 Message: 11636

Maybe I need to find some Bojangles promos and put 'em up on eBay. Some homesick Tarheel will buy 'em

Have to say that finding Red Sox stuff here is not the easiest thing, so have to go to websites that charge...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Friday, February 01, 2013 4:14 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Another amazing ebay price

Well, there are times I think it's all about notoriety. They are looking for their item to show up on Jay Leno's "eBay, did it sell?" segment.
A few years ago, some friends of mine and I, had a small contest, to see who could sell the least valuable item, for the most amount of money. I went to my local (SoCal folks will know this) In-N-Out Burger, and got one of their free window stickers. I then put it on eBay, auction style, and it sold for over $5, plus shipping, of whatever a postage stamp and envelope cost, at the time. I wasn't trying to cheat anyone, but wound up amazed that it sold to a guy, that according to his mailing address, lived less than a mile, from an In-N-Out Burger, where he could have gotten a stack of them for free.
As it turned out, my sticker sale, (was never the intent) wound up on the Leno show. So, I firmly think that this is frequently the motivation. They don't care if it sells, if they get their minute of fame. It's what I call, Jerry Springer Syndrome. Do anything, to get on TV. Regardless, how foolish one looks.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash. iPad

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11637. Wanted: PA cage lid for T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 02:51:36 UTC
From: dean_k5dh
Topic: 11637 Message: 11637

Looking for a PA cage lid for a T-4XC. Got an extra one you can spare?

73,
Dean K5DH

11638. RE: Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 03:04:26 UTC
From: wa7zyq
Topic: 11615 Message: 11638

This guy started offering this radio for about $10K some 6 months ago. I think he just loves the attention he gets over it.

David, WA7ZYQ

Sent from my Apple IIcRichard Knoppow <1oldlens1@...> wrote:
----- Original Message -----
From: "Ian Reeve" <ian.radioworkshop@hotmail.co.uk>
To: <drakeradio@yahoogroups.com>
Sent: Thursday, January 31, 2013 1:00 PM
Subject: RE: [DrakeRadio] Another amazing ebay price

I sent the seller a note about the price and the wrong description. We will see...

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@ix.netcom.com

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11639. Re: Re: [DrakeRadio] Another amazing ebay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 03:21:24 UTC
From: Richard Knoppow
Topic: 11615 Message: 11639

----- Original Message -----
From: "wa7zyq" <wa7zyq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 01, 2013 7:04 PM
Subject: RE: Re: [DrakeRadio] Another amazing ebay price

This guy started offering this radio for about $10K some 6
months ago. I think he just loves the attention he gets over
it.

David, WA7ZYQ

Well, I suppose that's why people go into show
business. No response to my message to him.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11640. Re: [DrakeRadio] Re: Another amazing eBay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 07:12:05 UTC
From: g4jss@tiscali.co.uk
Topic: 11615 Message: 11640

Will he still have to pay a final valuation fee on that amount

Vic

11641. Re: [DrakeRadio] Re: Another amazing eBay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 07:21:49 UTC
From: Bob Macklin
Topic: 11615 Message: 11641

eBay's final value fee is limited to $500!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"

----- Original Message -----
From: g4jss@...
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 01, 2013 11:12 PM
Subject: Re: [DrakeRadio] Re: Another amazing eBay price

Will he still have to pay a final valuation fee on that amount

Vic

[Non-text portions of this message have been removed]

11642. Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 11:02:22 UTC
From: Ernie Gray
Topic: 11642 Message: 11642

Hello Group,

I have a TR-4C s/n 37210, very very clean, aluminum chassis, no scratches on the front panel, a few minor nicks on the bottom shell and I had the top shell powder coated satin black and it came out very nice, needs a knob inlay. The TX pumps out almost 175 watts into a dummy load on 40 meters and I recall that is good. On RX, I regularly copy signals 59+ on 40. The AC-4 has the Bryce kit installed and works well. The matching MS-4 needs refinishing, another trip to the powder coaters. AND I have an MC-4 too to top it all off.

I tested all the tubes and the 12BA6's , all 3, tested weak. I bought some contact cleaner at Rack Shack and cleaned the band switch contacts with the sideband switch but it leaves an oily residue so I did not use it further, and I recleaned the switch contacts with acetone and swabs.

Wiggling the tubes in their sockets produce lots of noise so I feel I need to clean the tube sockets and pins but do not know the best way to do that. I am also curious which components typically gets changed due to age. I do not "hear" or see any issues with electrolytics and the T/R relay sounds good.

Cheers,
Ernie
W1MRQ

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

[Non-text portions of this message have been removed]

11643. Wanted: Power Switch/ Gain Assembly for T4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 03:51:47 UTC
From: terrycantrell2002
Topic: 11643 Message: 11643

I'm looking for a switch assembly/Gain control or Switch Cap only for my T4XB. Please advise if you have one or know of one that someone would be willing to part with. Also, would consider parts radio. Thanks! 73's Terry, W4WTC

11644. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 15:09:47 UTC
From: Steve Wedge
Topic: 11642 Message: 11644

Ernie -

I'd just use the finals as they are until they're done. It all depends on what sort of output you can get on 20/15/10.

A very small amount of Deoxit on the tube pins will ensure good contact, but it seems from what you describe that the receiver is working okay as is.

What are you getting for output on 10, and does max power out coincide with a dip in the plate current when tuning? I've found output can be low if neutralization isn't right (though mostly on the higher bands).

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Ernie Gray
Sent: Saturday, February 02, 2013 6:02 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Bringing a TR-4C back to life

Hello Group,

I have a TR-4C s/n 37210, very very clean, aluminum chassis, no scratches on the front panel, a few minor nicks on the bottom shell and I had the top shell powder coated satin black and it came out very nice, needs a knob inlay. The TX pumps out almost 175 watts into a dummy load on 40 meters and I recall that is good. On RX, I regularly copy signals 59+ on 40. The AC-4 has the Bryce kit installed and works well. The matching MS-4 needs refinishing, another trip to the powder coaters. AND I have an MC-4 too to top it all off.

I tested all the tubes and the 12BA6's , all 3, tested weak. I bought some contact cleaner at Rack Shack and cleaned the band switch contacts with the sideband switch but it leaves an oily residue so I did not use it further, and I recleaned the switch contacts with acetone and swabs.

Wiggling the tubes in their sockets produce lots of noise so I feel I need to clean the tube sockets and pins but do not know the best way to do that. I am also curious which components typically gets changed due to age. I do not "hear" or see any issues with electrolytics and the T/R relay sounds good.

Cheers,
Ernie
W1MRQ

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

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11645. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 15:32:29 UTC
From: Ernie Gray
Topic: 11642 Message: 11645

Steve,

I have not tried anything under 20 meters yet, but output is good on top 3 bands. Will tune it up on 10 meters today and see what the output is.

Like I said earlier, when I rock the tubes in their sockets, I get some noise in the receiver. Iwill get some Deoxit later and treat the sockets, and I have some fine Scotchbrite pads I thought I would clean the tube pins with. I figure jamming the tube through the Scotchbrite pad will,give the pins a good scouring. Maybe I'll try dousing the pad in acetone too.

TNX & 73's
Ernie

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, February 2, 2013 10:09 AM
Subject: Re: [DrakeRadio] Bringing a TR-4C back to life

Ernie -

I'd just use the finals as they are until they're done. It all depends on what sort of output you can get on 20/15/10.

A very small amount of Deoxit on the tube pins will ensure good contact, but it seems from what you describe that the receiver is working okay as is.

What are you getting for output on 10, and does max power out coincide with a dip in the plate current when tuning? I've found output can be low if neutralization isn't right (though mostly on the higher bands).

73,

Steve Wedge, W1ES/4

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All my computers have my signature with various pearls of wisdom appended thereto.

From: Ernie Gray
Sent: Saturday, February 02, 2013 6:02 AM

To: mailto:DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Bringing a TR-4C back to life

Hello Group,

I have a TR-4C s/n 37210, very very clean, aluminum chassis, no scratches on the front panel, a few minor nicks on the bottom shell and I had the top shell powder coated satin black and it came out very nice, needs a knob inlay. The TX pumps out almost 175 watts into a dummy load on 40 meters and I recall that is good. On RX, I regularly copy signals 59+ on 40. The AC-4 has the Bryce kit installed and works well. The matching MS-4 needs refinishing, another trip to the powder coaters. AND I have an MC-4 too to top it all off.

I tested all the tubes and the 12BA6's , all 3, tested weak. I bought some contact cleaner at Rack Shack and cleaned the band switch contacts with the sideband switch but it leaves an oily residue so I did not use it further, and I recleaned the switch contacts with acetone and swabs.

Wiggling the tubes in their sockets produce lots of noise so I feel I need to clean the tube sockets and pins but do not know the best way to do that. I am also curious which components typically gets changed due to age. I do not "hear" or see any issues with electrolytics and the T/R relay sounds good.

Cheers,
Ernie
W1MRQ

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

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11646. Re: Wanted: Power Switch/ Gain Assembly for T4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 15:51:53 UTC
From: Kevin LaHaie
Topic: 11643 Message: 11646

I forgot to report back onmy luck withthe SWITCH CAP I purchased from TR7DUDE on eBay, to repair the power switch function on the ganged pot of my T4XB

It did work, but had to slightly file the 'arm' with a small, circular file for it to clear something. It was a bit of a pain, but it made the radio 'whole' again.

Not sure if he still has them listed, but they were inexpensiveand retained the stock on/off function of the T4XB

The ebay listing has long since been removed socan't give specifics.

73 Kevin K7ZS
2B 2C 2NT R4B T4XB TR-4C RV-4C TR7 PS7 MN7 SP7 SPR-4

[Non-text portions of this message have been removed]

11647. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 16:07:22 UTC
From: VE3AX/7
Topic: 11642 Message: 11647

Ernie:

There will likely be a response from Garey here before I hit the send button.

Sounds like you have the TR4C pretty well tweaked and ready to go. Just did the tube pins to eliminate noise on one of my rigs - a TR-44C - with a small drop of De-Oxit on a brush, wipe each tube pin, one tube at a time, and re-install in the socket a couple of times. That's all that was needed on mine, May have repeated a couple of times on the odd tube to eliminate the "wiggle noise". Works very well. I would not use any abrasive on the tube pins.

Pretty sure the PA setup is the same as the T4X transmitter, just one more tube - I would check the screen dropping resistors and the cathode resistors on the PA tubes to make sure they haven't drifted high as they often do. Each group should be very close in value as well. Doing this from memory at the ski hill as I have my morning coffee and watch the sun come up, so dangerous at my age I know, but think the replacement screen resistors should be 68 ohm 1 watt and the cathode resistors are 15 ohm 2 watt. Search the archives for lots of info on their replacement – "Ohmite OX and OY resistor" search should turn up the right archive e-mails. Watch replacement on the screen resistors as one end is typically tied to easily broken feedthrough caps that essentially are unobtanium.

I'd also check that pesky RCVR/TRCV switch on the back side corner – wiggle it back and forth a fire a little shot of De-Oxit in there too. Though sounds like you're getting the rx path OK.

As Steve said, check the PA neutralization when you get 10m tuned up, also well documented in the archives, and if that's OK, time to put it on the air.

Curious where you are getting your cabinets done? I'd heard the place in Miamisburg, OH that used to do the Drakes weren't doing them anymore.

73

Peter
VE3AX/7

From: Ernie Gray
Sent: Saturday, February 02, 2013 7:32 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Bringing a TR-4C back to life

Steve,

I have not tried anything under 20 meters yet, but output is good on top 3 bands. Will tune it up on 10 meters today and see what the output is.

Like I said earlier, when I rock the tubes in their sockets, I get some noise in the receiver. Iwill get some Deoxit later and treat the sockets, and I have some fine

Scotchbrite pads I thought I would clean the tube pins with. I figure jamming the tube through the Scotchbrite pad will,give the pins a good scouring. Maybe I'll try dousing the pad in acetone too.

TNX & 73's
Ernie

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Steve Wedge mailto:w1es1982%40triad.rr.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Saturday, February 2, 2013 10:09 AM
Subject: Re: [DrakeRadio] Bringing a TR-4C back to life

Ernie -

I'd just use the finals as they are until they're done. It all depends on what sort of output you can get on 20/15/10.

A very small amount of Deoxit on the tube pins will ensure good contact, but it seems from what you describe that the receiver is working okay as is.

What are you getting for output on 10, and does max power out coincide with a dip in the plate current when tuning? I've found output can be low if neutralization isn't right (though mostly on the higher bands).

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Steve Wedge, W1ES/4

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From: Ernie Gray
Sent: Saturday, February 02, 2013 6:02 AM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Bringing a TR-4C back to life

Hello Group,

I have a TR-4C s/n 37210, very very clean, aluminum chassis, no scratches on the front panel, a few minor nicks on the bottom shell and I had the top shell powder coated satin black and it came out very nice, needs a knob inlay. The TX pumps out almost 175 watts into a dummy load on 40 meters and I recall that is good. On RX, I regularly copy signals 59+ on 40. The AC-4 has the Bryce kit installed and works well. The matching MS-4 needs refinishing, another trip to the powder coaters. AND I have an MC-4 too to top it all off.

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an oily residue so I did not use it further, and I recleaned the switch contacts with acetone and swabs.

Wiggling the tubes in their sockets produce lots of noise so I feel I need to clean the tube sockets and pins but do not know the best way to do that. I am also curious which components typically gets changed due to age. I do not "hear" or see any issues with electrolytics and the T/R relay sounds good.

Cheers,
Ernie
W1MRQ

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

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11648. RE: [DrakeRadio] Re: Wanted: Power Switch/ Gain Assembly for T4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 16:29:10 UTC
From: Terry Cantrell
Topic: 11643 Message: 11648

Hi Kevin:

Thanks for the input on the switch issue. I noticed that TR7DUDE had AC Switch Caps for R4B but wonder if it is compatible with T4XB switch mating to the mid section gain switch. I took the original switch apart and found the problem, which unfortunately, is not reparable. Maybe the R4B AC cap is worth a shot. 73's

Terry W4WTC

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Kevin LaHaie
Sent: Saturday, February 02, 2013 10:52 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Wanted: Power Switch/ Gain Assembly for T4XB

I forgot to report back onmy luck withthe SWITCH CAP I purchased from TR7DUDE on eBay, to repair the power switch function on the ganged pot of my T4XB

It did work, but had to slightly file the 'arm' with a small, circular file for it to clear something. It was a bit of a pain, but it made the radio 'whole' again.

Not sure if he still has them listed, but they were inexpensiveand retained the stock on/off function of the T4XB

The ebay listing has long since been removed socan't give specifics.

73 Kevin K7ZS
2B 2C 2NT R4B T4XB TR-4C RV-4C TR7 PS7 MN7 SP7 SPR-4

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[Non-text portions of this message have been removed]

11649. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 17:22:23 UTC
From: Chgypsy@...
Topic: 11642 Message: 11649

_ve3ax@..._ (mailto:ve3ax@...) writes:

cabinets done? I'd heard the place in Miamisburg, OH that used to do the Drakes weren't doing them anymore. Peter VE3AX/7
They are about a mile from my house and still will do cabinets. BUT they have a flat rate per piece, not cheap (something like $ 45 per). ....Per piece I.E. a TR3/4 any would have two pieces.
Carl wd8nhk

[Non-text portions of this message have been removed]

11650. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 17:25:36 UTC
From: Richard Knoppow
Topic: 11642 Message: 11650

----- Original Message -----
From: "Ernie Gray" <w1mrq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, February 02, 2013 7:32 AM
Subject: Re: [DrakeRadio] Bringing a TR-4C back to life

Steve,

I have not tried anything under 20 meters yet, but output is
good on top 3 bands. Will tune it up on 10 meters today and
see what the output is.

Like I said earlier, when I rock the tubes in their sockets,
I get some noise in the receiver. Iwill get some Deoxit
later and treat the sockets, and I have some fine
Scotchbrite pads I thought I would clean the tube pins with.
I figure jamming the tube through the Scotchbrite pad
will,give the pins a good scouring. Maybe I'll try dousing
the pad in acetone too.

TNX & 73's
Ernie

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

Clean the tube pins with a small wire brush and some
Deoxit. The socket can be cleaned with Deoxit and the small
triangular brushes sold for cleaning between your teeth.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11651. Re: Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 17:27:59 UTC
From: w7jpg
Topic: 11642 Message: 11651

"I need to clean the tube sockets and pins but do not know the best way to do that."

Many of us use a dental proxy brush (they are available in quite a few sizes) juiced up with a bit of De Oxit 5%. Insert into each pin socket..scrubba scrubba...flush (optional) with a bit of DeOxit Gold contact cleaner. Others will apply De Oxit to the pins of the tube...insert..remove..repeat....

Either way seems to do the trick.

Good luck,
Chris
W7JPG

--- In DrakeRadio@yahoogroups.com, Ernie Gray wrote:
>
> Hello Group,
>
> I have a TR-4C s/n 37210, very very clean, aluminum chassis, no scratches on the front panel, a few minor nicks on the bottom shell

11652. Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 18:41:51 UTC
From: k5fex
Topic: 11652 Message: 11652

Want to connect the Heil Headset to my T-4XC. Anyone have a diagram or instructions on how to convert from the 4 wire mic connector over to the 3 wire system in the Drake?

11653. Re: [DrakeRadio] Wanted: Power Switch/ Gain Assembly for T4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 18:52:23 UTC
From: Dan Galligan
Topic: 11643 Message: 11653

Terry,
I have had quite a bit of good fortune, and got great service, from Gary, WZ1M, at Transformer Rewinding Service. He stocks lots of parts for many old tube type radios. You can check his page here: http://tubes_tubes_tubes.tripod.com/
or you can email him, and I believe his email address link, is on that page.
He does not check email multiple times a day, or even daily, for that matter, so it might take him a couple of days to get back with you. But his prices are fair, and the parts are always good quality.
Also, check with Mark Olsen, at Nationwide Radio and Eq. Sales. He frequently has some used parts salvaged from irreparable radios, and Mark is a great guy to deal with.www.ke9pq.com
Best of luck to you, in your endeavor.

Dan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo@...
w3rxo@...

If ever a time should come, when vain and aspiring men shall possess the highest seats in Government, our country will stand in need of its experienced patriots to prevent its ruin.
Samuel Adams-Brewer/Patriot

11654. Re: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 19:04:58 UTC
From: Don Cunningham
Topic: 11652 Message: 11654

Heil makes an adapter from your headset to the Drake 3 pin 3/16" plug. BUT the Heil microphones are mostly low impedance, and the Drake 4 line requires high impedance. Heil used to sell a transformer to make their microphones fit the vintage gear, but I think it was already in the Heil "vintage" Goldline microphone, so am not sure it is still available separately.

Anyway, you need to know if your headset requires a voltage to run. An email to Heil's crew will let you know if they make something ready made to work with your headset. They also used to have wiring information on their site if you want to try it on your own, but I haven't accessed that in a long time. Low impedance won't hurt your Drake 4 line gear, you just won't be able to get enough drive out of it. The TR7 4 pin can be re-wired for low impedance. Info for that is on www.WB4HFN.com I think.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11655. Need an Electric Radio Article

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 19:36:19 UTC
From: Joe
Topic: 11655 Message: 11655

Hi Guys,
Although it's not a Drake article, I am looking for a scan of a May 2006 Electric Radio article regarding a National NC-98. Can anyone can and send me copy?
Joe N9JCQ

11656. Re: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 20:03:23 UTC
From: Wayne Smith
Topic: 11652 Message: 11656

Thanks Don. I ordered the Drake adapter for the headset. Came as a 4 pin round instead of the .208 Dia 3 pin. Will investigate the impedance match

Sent from my iPhone

On Feb 2, 2013, at 1:04 PM, "Don Cunningham" <donc@martineer.net> wrote:

> Heil makes an adapter from your headset to the Drake 3 pin 3/16" plug. BUT the Heil microphones are mostly low impedance, and the Drake 4 line requires high impedance. Heil used to sell a transformer to make their microphones fit the vintage gear, but I think it was already in the Heil "vintage" Goldline microphone, so am not sure it is still available separately.
>
> Anyway, you need to know if your headset requires a voltage to run. An email to Heil's crew will let you know if they make something ready made to work with your headset. They also used to have wiring information on their site if you want to try it on your own, but I haven't accessed that in a long time. Low impedance won't hurt your Drake 4 line gear, you just won't be able to get enough drive out of it. The TR7 4 pin can be re-wired for low impedance. Info for that is on www.WB4HFN.com I think.
> 73,
> Don, WB5HAK
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11657. Re: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-02 20:12:35 UTC
From: Don Cunningham
Topic: 11652 Message: 11657

Wayne,

I totally misunderstood what you were needing. From the TR7 manual, the standard microphone connection is: Pin 1 is audio from the mic element, Pin 2 is PTT and pin 3 is the shield (ground for PTT). From the T4XC manual (3/16" plug) Tip is PTT, Ring is audio from the mic element and Sleeve is the shield (ground for PTT).

The impedance match is important, but try it, all it will do if it's low impedance is there won't be enough drive, then you can get the matching transformer. No harm will come, hi.

Hope that helps.
Don, WB5HAK

[Non-text portions of this message have been removed]

11658. Re: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 00:40:53 UTC
From: Wayne Smith
Topic: 11652 Message: 11658

Thanks Don. What I was looking for. The heil adapter for drake (AD1-D). Is apparently for 7 line. Has the 4 pin mic connector. Building break out box to change over to the phone plug.

Sent from my iPhone

On Feb 2, 2013, at 2:12 PM, "Don Cunningham" <donc@...> wrote:

> Wayne,
>
> I totally misunderstood what you were needing. From the TR7 manual, the standard microphone connection is: Pin 1 is audio from the mic element, Pin 2 is PTT and pin 3 is the shield (ground for PTT). From the T4XC manual (3/16" plug) Tip is PTT, Ring is audio from the mic element and Sleeve is the shield (ground for PTT).
>
> The impedance match is important, but try it, all it will do if it's low impedance is there won't be enough drive, then you can get the matching transformer. No harm will come, hi.
>
> Hope that helps.
> Don, WB5HAK
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11659. Re: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 01:58:33 UTC
From: Don Cunningham
Topic: 11652 Message: 11659

My pleasure, Wayne. Sorry I didn't get it the first time. Getting older is a bummer, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11660. RE: [DrakeRadio] Pin out for Heil Pro Set

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 02:14:05 UTC
From: Wayne Smith
Topic: 11652 Message: 11660

I do understand!

After some research, appears the proset is a 600 ohm impedance. HRO has a transformer to match to the HiZ on Drakes.

Also found the pin outs for the connectors .

Having issues with my T-4XC audio drive (even when using the D-104). Enough that I actually purchased a second T-4XC off ebay.

The new one has some issues. Freq is off by about 25KHz. What I can't figure out so far is the output. With GAIN at 9-10 o'clock, the Plate Current can go to .300 mA when tuned up on freq. At full Tune, can hit 200 watts out on 80 meters on key down. My original TX cant reach that level.

73

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Don Cunningham
Sent: Saturday, February 02, 2013 7:59 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Pin out for Heil Pro Set

My pleasure, Wayne. Sorry I didn't get it the first time. Getting older is a bummer, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11661. looking for a tx4-? and supply.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 02:41:24 UTC
From: yash@aol.com
Topic: 11661 Message: 11661

Looking for a 4 line transmitter and a power supply. Please get back off line .
thanks
dale wt4t

[Non-text portions of this message have been removed]

11662. Re: Questions re: Drake W4 Wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 03:56:29 UTC
From: ko4bg
Topic: 11587 Message: 11662

Curt: You have a K4DPK pep kit installed in your W4, really a quality pep kit, put 12v to it and you have a totally different meter. These are made by Phil K4DPK from Rome, Ga.
Woody

--- In DrakeRadio@yahoogroups.com, "curtstamp" wrote:
>
>
> I have placed two images of my Drake W4 Wattmeter in my photo folder KC9UNL. I bought this item on Ebay and have the manual. What is the additional piece that I think has been added which shows Peak, Ave, Cal Hang?
>
> Any help that you can provide would be very helpful.
>
> Curt KC9UNL
>

11663. Re: [DrakeRadio] Need an Electric Radio Article

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 05:21:46 UTC
From: Byron Hayes, Jr.
Topic: 11655 Message: 11663

Joe,

I checked the May 2006 issue, and did not find a NC-98
article. There is a NC-98 article by Chuck Teeters in the September
2006 issue, page 2. Is that the one you want? If so, contact me off-list.

Byron Hayes, Jr., WA6ATN
bhayes@...

At 11:36 AM 2/2/2013, you wrote:
>Hi Guys,
>Although it's not a Drake article, I am looking for a scan of a May
>2006 Electric Radio article regarding a National NC-98. Can anyone
>can and send me copy?
>Joe N9JCQ
>
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>Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11664. Re: [DrakeRadio] Re: Another amazing eBay price

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 09:32:14 UTC
From: g4jss@tiscali.co.uk
Topic: 11615 Message: 11664

Thank you - the price of fame!!

11665. Re: [DrakeRadio] Bringing a TR-4C back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 13:25:52 UTC
From: Robert Nohren
Topic: 11642 Message: 11665

I've found it's a better idea to use denatured alcohol to clean any contacts or pins. No residue left and if you get thirsty; well, there ya go.

Seriously, if you use anything more abrasive than a piece of bond paper, it can leave scratches and microscopic grooves in the surface that promotes corrosion coming back at a faster rate. It builds up in the grooves. I've not used Deoxit but sounds like a good product.

BobN N4IBK

11666. Intro and 2NT

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 17:38:27 UTC
From: k7tp
Topic: 11666 Message: 11666

Hello to all,

I am K7TP, Grover, in the North of California. I have had a few Drake stations over the years but now have only a 2-C receiver.

Since I spend much of my time on the air with a Globe xtal controlled transmitter and a Hallicrafters SX-28, I thought to graduate to a station with a 2NT and the 2-C receiver.

So what are my chances of finding a working, not mint, 2NT for a price under $200?

73

K7TP/W6MGY

11667. Re: [DrakeRadio] Intro and 2NT

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 18:02:25 UTC
From: Garey Barrell
Topic: 11666 Message: 11667

Hi Grover -

Welcome to the group.! 2-NTs show up fairly often on eBay, typically for under $200 in decent
shape. One went just recently for $330, but it was essentially new with excellent copper and final
revisions. I have seen a couple on eHam as well.

There were several changes made with s/n 1000 for the 2-NT, and another group of late changes for
the 2-C and 2-NT. The latter changes were never updated on Drake documents, but updated schematics
are on my Service Supplement CD for both units, as well as all previous versions.

A 'want to buy' on the list often turns up something.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k7tp wrote:
> Hello to all,
>
> I am K7TP, Grover, in the North of California. I have had a few Drake stations over the years but now have only a 2-C receiver.
>
> Since I spend much of my time on the air with a Globe xtal controlled transmitter and a Hallicrafters SX-28, I thought to graduate to a station with a 2NT and the 2-C receiver.
>
> So what are my chances of finding a working, not mint, 2NT for a price under $200?
>
> 73
>
> K7TP/W6MGY
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11668. Re: [DrakeRadio] Intro and 2NT

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 19:43:25 UTC
From: Steve Wedge
Topic: 11666 Message: 11668

I've seen 2NT's at hamfests in the $50 range, so if you're patient, deals can be had.

I even bought a 2C at a hamfest (2009) for $65 and yes, it was working! Typical prices for 2C's these days approach R-4A prices due to their rarity.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, February 03, 2013 1:02 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Intro and 2NT

Hi Grover -

Welcome to the group.! 2-NTs show up fairly often on eBay, typically for under $200 in decent
shape. One went just recently for $330, but it was essentially new with excellent copper and final
revisions. I have seen a couple on eHam as well.

There were several changes made with s/n 1000 for the 2-NT, and another group of late changes for
the 2-C and 2-NT. The latter changes were never updated on Drake documents, but updated schematics
are on my Service Supplement CD for both units, as well as all previous versions.

A 'want to buy' on the list often turns up something.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

k7tp wrote:
> Hello to all,
>
> I am K7TP, Grover, in the North of California. I have had a few Drake stations over the years but now have only a 2-C receiver.
>
> Since I spend much of my time on the air with a Globe xtal controlled transmitter and a Hallicrafters SX-28, I thought to graduate to a station with a 2NT and the 2-C receiver.
>
> So what are my chances of finding a working, not mint, 2NT for a price under $200?

>
> 73
>
> K7TP/W6MGY
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[Non-text portions of this message have been removed]

11669. Uh-oh...!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 20:34:21 UTC
From: Eddy Swynar
Topic: 11669 Message: 11669

Hi Guys,

Sure does look like someone from 'Over 'Ome has dismantled an R-4C, & is in the process of parting it out, on eBay (look at the bottom after searching "Drake R-4C", under "International Sellers").

One can only hope that this "victim" was NOT alive & well at the time of its falling victim to such cannibalism!

Anyway, a good opportunity to stock-up on what might otherwise be "unobtainium" parts & assemblies...

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

11670. Old Fart Newbie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 21:42:56 UTC
From: Mark the Dark
Topic: 11670 Message: 11670

Hello. I just joined the group although I am an old fart in the hobby. I have a Drake SPR-4 that is still chugging happily along after all these years. It's serial number is 0439 and I even have the inspection slip from the factory from August 26, 1970.

I edit the shortwave loggings column "Your Reports Express" for the Ontario DX Association.

Mark Coady
Selwyn, Ontario

11671. RE: [DrakeRadio] Uh-oh...!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-03 22:40:00 UTC
From: Ian Reeve
Topic: 11669 Message: 11671

Hi Eddy and all list members.

This guy is "parts dx" and basically they buy up working or non-working models of certain vintage radios including Yaesu FT101 etc, Kenwoods and the classics like the Drake. Infact anything they can get hold of that is "too far gone" to be economical to bring back to a decent piece of kit.
Quite often the radios will be working but the cases are too far gone or the PA stage has suffered a meltdown.
He trades out of London and is a good source of rare parts.
I have bought from him- a power supply panel for a FR101 and he is genuine. Infact I still have the panel I bought unused as I had a brain wave and found a way round the failed voltage regulator which seemed to be a common issue.
Our Radio Club, the Wythall Radio Club who are very active in the B'ham area in the UK hold an annual rally (hamvention) and last year another guy who does the same - hifissb- was interested in two FRG7's I had for sale. I knew it was him and they would be parted out so I would not sell them to him to his annoyance but there will be occasions where good working equipment is parted out to keep the spares flowing. Sadly the many parts will make much more than a complete receiver but personally I cannot part our working kit if I can give it a good home.
I personally have a R4C- an early model which I use regularly and it's great!

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: deswynar@...
Date: Sun, 3 Feb 2013 15:34:21 -0500
Subject: [DrakeRadio] Uh-oh...!

Hi Guys,

Sure does look like someone from 'Over 'Ome has dismantled an R-4C, & is in the process of parting it out, on eBay (look at the bottom after searching "Drake R-4C", under "International Sellers").

One can only hope that this "victim" was NOT alive & well at the time of its falling victim to such cannibalism!

Anyway, a good opportunity to stock-up on what might otherwise be "unobtainium" parts & assemblies...

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11672. 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 00:25:16 UTC
From: Rich Arland
Topic: 11672 Message: 11672

Let's see how good this group really is:

I have a 1951 edition of The Radio Handbook, by Editors and Engineers. It is in tatters. Totally falling apart. I had two other editions, both from the 1960s but they have disappeared apparently during the move from PA to GA.

Anyone out there have a more current copy of this book, say somewhere between 1960 and 1966, that they would be willing to part with? If so, please contact me off-list and we'll see if we can't do a deal.

Many thanks.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

[Non-text portions of this message have been removed]

11673. Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 00:35:00 UTC
From: Rich Arland
Topic: 11540 Message: 11673

WOW!! What a week!!!

I ordered Garey's 2B DVD...it arrived in just 3 days! What a goldmine of excellent info on this old warhorse!

Then, on the same day, the four section cap for the 2B PSU arrived from Hayseed Hamfest. Tommy does some great work! It's almost too pretty to put into the radio!

Add to this the dial strings, capacitor replacement package, dial "noogie" (you know that little red thingie that you push/pull to cal the dial) and the rubber feet for my old Vibroplex single lever paddle arrived from 2B Radio Parts LLC!

It was like Christmas all over again! Looks like I'll have to get busy and start soldering! Thanks to all who provided information, tips, and parts information for this restoration.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

[Non-text portions of this message have been removed]

11674. Re: [DrakeRadio] Intro and 2NT

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 01:11:03 UTC
From: Grover Cleveland
Topic: 11666 Message: 11674

Thanks everyone for the info. I'll wait it out and see what might be available at Dayton, or eBay.

Grover Cleveland
---
www.sierratraveler.com

On Feb 3, 2013, at 11:43 AM, "Steve Wedge" <w1es1982@triad.rr.com> wrote:

> I've seen 2NT's at hamfests in the $50 range, so if you're patient, deals can be had.
>
> I even bought a 2C at a hamfest (2009) for $65 and yes, it was working! Typical prices for 2C's these days approach R-4A prices due to their rarity.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: Garey Barrell
> Sent: Sunday, February 03, 2013 1:02 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Intro and 2NT
>
> Hi Grover -
>
> Welcome to the group.! 2-NTs show up fairly often on eBay, typically for under $200 in decent
> shape. One went just recently for $330, but it was essentially new with excellent copper and final
> revisions. I have seen a couple on eHam as well.
>
> There were several changes made with s/n 1000 for the 2-NT, and another group of late changes for
> the 2-C and 2-NT. The latter changes were never updated on Drake documents, but updated schematics
> are on my Service Supplement CD for both units, as well as all previous versions.
>
> A 'want to buy' on the list often turns up something.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs

>
> k7tp wrote:
> > Hello to all,
> >
> > I am K7TP, Grover, in the North of California. I have had a few Drake stations over the years but now have only a 2-C receiver.
> >
> > Since I spend much of my time on the air with a Globe xtal controlled transmitter and a Hallicrafters SX-28, I thought to graduate to a station with a 2NT and the 2-C receiver.
> >
> > So what are my chances of finding a working, not mint, 2NT for a price under $200?
> >
> > 73
> >
> > K7TP/W6MGY
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[Non-text portions of this message have been removed]

11675. TR-7 Filter Swap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 01:29:43 UTC
From: qrpcwop
Topic: 9253 Message: 11675

It never hurts to ask...

Anyone interested in swapping an SL-1800 for my SL-4000?

73 - Al, K2ZN

11676. Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 01:48:20 UTC
From: Richard Knoppow
Topic: 11672 Message: 11676

----- Original Message -----
From: "Rich Arland" <k7sz@...>
To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
Sent: Sunday, February 03, 2013 4:25 PM
Subject: [DrakeRadio] 1960-to-1966 Radio Handbook needed

>
> Let's see how good this group really is:
>
> I have a 1951 edition of The Radio Handbook, by Editors
> and Engineers. It is in tatters. Totally falling apart. I
> had two other editions, both from the 1960s but they have
> disappeared apparently during the move from PA to GA.
>
> Anyone out there have a more current copy of this book,
> say somewhere between 1960 and 1966, that they would be
> willing to part with? If so, please contact me off-list
> and we'll see if we can't do a deal.

One possibility is to search Amazon. I've gotten a
number of fairly rare old technical books through them. You
usually get a choice of prices. There is a PDF version of
the 1959 and 1940 editions at www.tubebooks.org These are
large files but very good scans.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11677. RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 01:56:37 UTC
From: George- K4GM
Topic: 11677 Message: 11677

Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although it powers up with dial light and red neon bulb, there is no signal arriving at the TR4Cw in any of the switch positions. I don't have a 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD so will measure voltages and resistance but was curious if there are any known common problems with the RV4C or the cables etc. The TR4Cw is working fine by itself. Any thoughts appreciated.

George K4GM

11678. Re: [DrakeRadio] TR-7 Filter Swap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 03:32:50 UTC
From: Jim Shorney
Topic: 9253 Message: 11678

One of you guys with an R-7 needs to jump on this. The SL-4000 is superb for AM in the R-7.

73

-Jim
NU0C

On Mon, 04 Feb 2013 01:29:43 -0000, qrpcwop wrote:

>It never hurts to ask...
>
>Anyone interested in swapping an SL-1800 for my SL-4000?
>
>73 - Al, K2ZN
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11679. Re: [DrakeRadio] TR-7 Filter Swap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 03:47:24 UTC
From: Don Cunningham
Topic: 9253 Message: 11679

Jim,

Is it better than the SL-6000 or SL-8000??
Tks,
Don, WB5HAK

[Non-text portions of this message have been removed]

11680. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 03:59:52 UTC
From: Bernie
Topic: 11540 Message: 11680

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??
How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??
----- Original Message -----
From: Rich Arland
To: DrakeGroup@Yahoo
Sent: Sunday, February 03, 2013 6:35 PM
Subject: [DrakeRadio] Drake 2B Restoration

WOW!! What a week!!!

I ordered Garey's 2B DVD...it arrived in just 3 days! What a goldmine of excellent info on this old warhorse!

Then, on the same day, the four section cap for the 2B PSU arrived from Hayseed Hamfest. Tommy does some great work! It's almost too pretty to put into the radio!

Add to this the dial strings, capacitor replacement package, dial "noogie" (you know that little red thingie that you push/pull to cal the dial) and the rubber feet for my old Vibroplex single lever paddle arrived from 2B Radio Parts LLC!

It was like Christmas all over again! Looks like I'll have to get busy and start soldering! Thanks to all who provided information, tips, and parts information for this restoration.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

[Non-text portions of this message have been removed]

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11681. Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 04:01:32 UTC
From: ko4bg
Topic: 11681 Message: 11681

Hello I use a 10 DA mic on a boom and 5 position sw. so I can switch it between all my Drake Rigs and also a Ten Tec Onmi 6+. The problem is the TR5 doesn't seem to like it at all. I have it wired with the two wire hook up as I only work VOX, it keys up and I can talk with it but it doesn't do a good job, it doesn't have the punch that it should have. Anyone have any suggestions?
Thanks
"Woody" KO4BG

11682. Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 04:07:40 UTC
From: Ethan Blanton
Topic: 11672 Message: 11682

Rich Arland spake unto us the following wisdom:
> I have a 1951 edition of The Radio Handbook, by Editors and Engineers.
> It is in tatters. Totally falling apart. I had two other editions,
> both from the 1960s but they have disappeared apparently during the
> move from PA to GA.

What a great book!

> Anyone out there have a more current copy of this book, say somewhere
> between 1960 and 1966, that they would be willing to part with? If so,
> please contact me off-list and we'll see if we can't do a deal.

You might want to check ABE Books (http://www.abebooks.com/), I have
purchased both a 16th and 17th edition there for fair prices.

Ethan

11683. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 04:09:20 UTC
From: Garey Barrell
Topic: 11677 Message: 11683

Check Q3 (PTO supply 11VDC). The Collector should be 11V when the RV-4C is supposed to be the
controlling PTO, and the red light on the RV-4C should be ON. The Base of Q3 should be near 0in
this situation.

When the TR-4Cis controlling, the red light on the RV-4C should be OUT, the Base of Q3 should be
+0.6 VDC, and the Collector should be near 0.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George- K4GM wrote:
> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although it
> powers up with dial light and red neon bulb, there is no signal
> arriving at the TR4Cw in any of the switch positions. I don't have a
> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD so
> will measure voltages and resistance but was curious if there are any
> known common problems with the RV4C or the cables etc. The TR4Cw is
> working fine by itself. Any thoughts appreciated.
>
> George K4GM
>
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> Yahoo! Groups Links
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11684. Re: [DrakeRadio] Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 04:13:41 UTC
From: Dan Galligan
Topic: 11681 Message: 11684

Maybe Garey or Richard, or another of the far smarter than ME, guys, can explain why there would be a difference, but on my T4X-B, the 10-DA, is it's favorite microphone. I've tried Heils, D-104's (preamp and not), Shures, EV's, and even some nice looking, but obscure brands, that I have since sold. For whatever reason, a 10-DA, on a TUG-8 stand, with the amplification set low, is the best sounding mic on my B. maybe there's a difference in the transmit audio section of the two radios, or maybe there is a modification in one of our radios, making the difference. But, I am quite happy with that mic, on my Killer B.

73,
Dan
W3RXO/W6

In tough economic times, like we are currently experiencing, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my relatively bright, electronic leash.

On Feb 3, 2013, at 20:01, ko4bg <ko4bg1@...> wrote:

Hello I use a 10 DA mic on a boom and 5 position sw. so I can switch it between all my Drake Rigs and also a Ten Tec Onmi 6+. The problem is the TR5 doesn't seem to like it at all. I have it wired with the two wire hook up as I only work VOX, it keys up and I can talk with it but it doesn't do a good job, it doesn't have the punch that it should have. Anyone have any suggestions?
Thanks
"Woody" KO4BG

Yahoo! Groups Links

11685. Re: [DrakeRadio] Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 04:23:30 UTC
From: Dan Galligan
Topic: 11681 Message: 11685

That's what I get for not reading fully, or else seeing something that wasn't there. I was thinking of a TR-4, when I replied. I presume there are significant differences between the T4X-B and a TR-5, transmit audio circuit. Completely different animals, I would guess. Sorry for being a cad.

Dan

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 3, 2013, at 8:13 PM, Dan Galligan <w3rxo@...> wrote:

> Maybe Garey or Richard, or another of the far smarter than ME, guys, can explain why there would be a difference, but on my T4X-B, the 10-DA, is it's favorite microphone. I've tried Heils, D-104's (preamp and not), Shures, EV's, and even some nice looking, but obscure brands, that I have since sold. For whatever reason, a 10-DA, on a TUG-8 stand, with the amplification set low, is the best sounding mic on my B. maybe there's a difference in the transmit audio section of the two radios, or maybe there is a modification in one of our radios, making the difference. But, I am quite happy with that mic, on my Killer B.
>
> 73,
> Dan
> W3RXO/W6
>
> In tough economic times, like we are currently experiencing, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
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> Sent from my relatively bright, electronic leash.
>
> On Feb 3, 2013, at 20:01, ko4bg <ko4bg1@...> wrote:
>
> Hello I use a 10 DA mic on a boom and 5 position sw. so I can switch it between all my Drake Rigs and also a Ten Tec Onmi 6+. The problem is the TR5 doesn't seem to like it at all. I have it wired with the two wire hook up as I only work VOX, it keys up and I can talk with it but it doesn't do a good job, it doesn't have the punch that it should have. Anyone have any suggestions?
> Thanks
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> Yahoo! Groups Links
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11686. RE: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 05:22:06 UTC
From: Rich Arland
Topic: 11540 Message: 11686

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??

How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??
Well, I am not really sure...gonna have to re-read the info on the website. Of course, there is always a few ounces of C-4 and some det-cord!!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

To: DrakeRadio@yahoogroups.com
From: barcand@nccray.com
Date: Sun, 3 Feb 2013 21:59:52 -0600
Subject: Re: [DrakeRadio] Drake 2B Restoration

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??

How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??

----- Original Message -----

From: Rich Arland

To: DrakeGroup@Yahoo

Sent: Sunday, February 03, 2013 6:35 PM

Subject: [DrakeRadio] Drake 2B Restoration

WOW!! What a week!!!

I ordered Garey's 2B DVD...it arrived in just 3 days! What a goldmine of excellent info on this old warhorse!

Then, on the same day, the four section cap for the 2B PSU arrived from Hayseed Hamfest. Tommy does some great work! It's almost too pretty to put into the radio!

Add to this the dial strings, capacitor replacement package, dial "noogie" (you know that little red thingie that you push/pull to cal the dial) and the rubber feet for my old Vibroplex single lever paddle arrived from 2B Radio Parts LLC!

It was like Christmas all over again! Looks like I'll have to get busy and start soldering! Thanks to all who provided information, tips, and parts information for this restoration.

Rich Arland, K7SZ

Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

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11687. RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 05:16:48 UTC
From: Rich Arland
Topic: 11672 Message: 11687

Ethan:

Thanks for the tip. Just ordered a 1967 editon for $35 from Abe. Good call!!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

To: DrakeRadio@yahoogroups.com
From: ethan.blanton@att.net
Date: Sun, 3 Feb 2013 23:07:40 -0500
Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Rich Arland spake unto us the following wisdom:

> I have a 1951 edition of The Radio Handbook, by Editors and Engineers.

> It is in tatters. Totally falling apart. I had two other editions,

> both from the 1960s but they have disappeared apparently during the

> move from PA to GA.

What a great book!

> Anyone out there have a more current copy of this book, say somewhere

> between 1960 and 1966, that they would be willing to part with? If so,

> please contact me off-list and we'll see if we can't do a deal.

You might want to check ABE Books (http://www.abebooks.com/), I have

purchased both a 16th and 17th edition there for fair prices.

Ethan

[Non-text portions of this message have been removed]

11688. Re: [DrakeRadio] TR-7 Filter Swap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 05:23:45 UTC
From: Jim Shorney
Topic: 9253 Message: 11688

I suppose it's ultimately in the "ear" of the beholder, but the R-7 detector is designed to decode in a sort of synchronous fashion and, with the SL-4000, allows you to tune one sideband or the other with the PBT while maintaining better than 3 KHz bandwidth for good fidelity audio. To my ears, it sounds noticably better than the SL-6000 did in my R-7 - probably due to the reduced noise bandwidth and the ablility to eliminate interference from the other sideband.

By contrast, an SL-4000 in a TR-7 is horrible. You really need a 6000 in the TR-7. Never had an 8000, but that might sound too wide for me.

73

-Jim
NU0C

On Sun, 3 Feb 2013 21:47:24 -0600, Don Cunningham wrote:

>Jim,
>
>Is it better than the SL-6000 or SL-8000??
>Tks,
>Don, WB5HAK

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

11689. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 11:05:29 UTC
From: Don Adams
Topic: 11540 Message: 11689

You can can get a brand new one as well as other 2B goodies at Drake Radio Parts.

http://www.2bradioparts.com/

--- On Sun, 2/3/13, Bernie <barcand@...> wrote:

From: Bernie <barcand@...>
Subject: Re: [DrakeRadio] Drake 2B Restoration
To: DrakeRadio@yahoogroups.com
Date: Sunday, February 3, 2013, 10:59 PM

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??
How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??
----- Original Message -----
From: Rich Arland
To: DrakeGroup@Yahoo
Sent: Sunday, February 03, 2013 6:35 PM
Subject: [DrakeRadio] Drake 2B Restoration

WOW!! What a week!!!

I ordered Garey's 2B DVD...it arrived in just 3 days! What a goldmine of excellent info on this old warhorse!

Then, on the same day, the four section cap for the 2B PSU arrived from Hayseed Hamfest. Tommy does some great work! It's almost too pretty to put into the radio!

Add to this the dial strings, capacitor replacement package, dial "noogie" (you know that little red thingie that you push/pull to cal the dial) and the rubber feet for my old Vibroplex single lever paddle arrived from 2B Radio Parts LLC!

It was like Christmas all over again! Looks like I'll have to get busy and start soldering! Thanks to all who provided information, tips, and parts information for this restoration.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

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11690. RE: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 11:52:16 UTC
From: Rich Arland
Topic: 11540 Message: 11690

Hi Don:

that's where I got mine!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

To: DrakeRadio@yahoogroups.com
From: donsadam2000@...
Date: Mon, 4 Feb 2013 03:05:29 -0800
Subject: Re: [DrakeRadio] Drake 2B Restoration

You can can get a brand new one as well as other 2B goodies at Drake Radio Parts.

http://www.2bradioparts.com/

--- On Sun, 2/3/13, Bernie barcand@...> wrote:

From: Bernie barcand@...>

Subject: Re: [DrakeRadio] Drake 2B Restoration

To: DrakeRadio@yahoogroups.com

Date: Sunday, February 3, 2013, 10:59 PM

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??

How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??

----- Original Message -----

From: Rich Arland

To: DrakeGroup@Yahoo

Sent: Sunday, February 03, 2013 6:35 PM

Subject: [DrakeRadio] Drake 2B Restoration

WOW!! What a week!!!

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BLOG: http://commobunker.blogspot.com/

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11691. Re: [DrakeRadio] Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 13:54:17 UTC
From: Chgypsy@...
Topic: 11681 Message: 11691

ko4bg1@... writes:

I have it wired with the two wire hook up as I only work VOX, it keys up and I can talk with it but it doesn't do a good job, it doesn't have the punch that it should have. Anyone have any suggestions?
"Woody" KO4BG
You sure that rig doesn't want to see a grounded ptt line when using the two wires and vox switch?
Carl wd8nhk

[Non-text portions of this message have been removed]

11692. Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 15:04:55 UTC
From: Paul Kraemer
Topic: 11672 Message: 11692

Rich
Another must have in the BA library is RSGB handbook from the era
Paul K0UYA
----- Original Message -----
From: "Rich Arland" <k7sz@...>
To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
Sent: Sunday, February 03, 2013 11:16 PM
Subject: RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed

>
> Ethan:
>
> Thanks for the tip. Just ordered a 1967 editon for $35 from Abe. Good
> call!!!
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
> (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
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> To: DrakeRadio@yahoogroups.com
> From: ethan.blanton@...
> Date: Sun, 3 Feb 2013 23:07:40 -0500
> Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed
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> What a great book!
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>> Anyone out there have a more current copy of this book, say somewhere
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>> between 1960 and 1966, that they would be willing to part with? If so,
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>> please contact me off-list and we'll see if we can't do a deal.
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> You might want to check ABE Books (http://www.abebooks.com/), I have
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> purchased both a 16th and 17th edition there for fair prices.
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> Ethan
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> Yahoo! Groups Links
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11693. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 15:05:53 UTC
From: Don Adams
Topic: 11540 Message: 11693

The little red dial calibration "noogie" just pops in. Pull the old one out and pop the new one in.

--- On Mon, 2/4/13, Don Adams <donsadam2000@yahoo.com> wrote:

From: Don Adams <donsadam2000@...>
Subject: Re: [DrakeRadio] Drake 2B Restoration
To: DrakeRadio@yahoogroups.com
Date: Monday, February 4, 2013, 6:05 AM

You can can get a brand new one as well as other 2B goodies at Drake Radio Parts.

http://www.2bradioparts.com/

--- On Sun, 2/3/13, Bernie barcand@...> wrote:

From: Bernie barcand@...>
Subject: Re: [DrakeRadio] Drake 2B Restoration
To: DrakeRadio@yahoogroups.com
Date: Sunday, February 3, 2013, 10:59 PM

So....how does one go about replacing the "dial noogie" (red post) on a 2-B if I get my hands on a nice new red one??
How is it fastened in?? Can it be done from the outside or does one have to get dial glass from the inside? Please advise??
----- Original Message -----
From: Rich Arland
To: DrakeGroup@Yahoo
Sent: Sunday, February 03, 2013 6:35 PM
Subject: [DrakeRadio] Drake 2B Restoration

WOW!! What a week!!!

I ordered Garey's 2B DVD...it arrived in just 3 days! What a goldmine of excellent info on this old warhorse!

Then, on the same day, the four section cap for the 2B PSU arrived from Hayseed Hamfest. Tommy does some great work! It's almost too pretty to put into the radio!

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It was like Christmas all over again! Looks like I'll have to get busy and start soldering! Thanks to all who provided information, tips, and parts information for this restoration.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

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11694. RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 15:20:18 UTC
From: Rich Arland
Topic: 11672 Message: 11694

'Ya know...the very sad part about that is when I was stationed in the UK during the early 80s I had several RSGB Handbooks, one from the 1960s. Of course, to save weight when we moved back stateside, I sold or gave them all away! Silly me!!

I will contact G3RJV and see if he can locate one for me and bring it to Dayton this year. Thanks for that tip, Paul.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

To: DrakeRadio@yahoogroups.com
From: elespe@...
Date: Mon, 4 Feb 2013 09:04:55 -0600
Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Rich

Another must have in the BA library is RSGB handbook from the era

Paul K0UYA

----- Original Message -----

From: "Rich Arland" k7sz@...>

To: "DrakeGroup@Yahoo" drakeradio@yahoogroups.com>

Sent: Sunday, February 03, 2013 11:16 PM

Subject: RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed

>

> Ethan:

>

> Thanks for the tip. Just ordered a 1967 editon for $35 from Abe. Good

> call!!!

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>

> Rich Arland, K7SZ

> Dacula, GA

>

> Author: "The ARRL's Low Power Communications, the Art and Science of QRP"

> (4th ed)

>

> BLOG: http://commobunker.blogspot.com/

>

>

> To: DrakeRadio@yahoogroups.com

> From: ethan.blanton@...

> Date: Sun, 3 Feb 2013 23:07:40 -0500

> Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

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> Yahoo! Groups Links

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11695. Re: [DrakeRadio] TR-7 Filter Swap

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 15:53:50 UTC
From: Don Cunningham
Topic: 9253 Message: 11695

Thanks, Jim. I had read the copy on one sideband and just wondered. Most of my experience on AM has been with the TR7, and I share your comment on the 6000 being much improved.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11696. Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 15:58:13 UTC
From: Keith Evans
Topic: 11672 Message: 11696

Hi Rich,
I am going to a rally at the week end, If I see a copy of the early 1960's RSGB Handbook for sale, I'll buy it if a reasonable price.
We can work out the postage later.
73
Keith G3VKW

----- Original Message -----
From: "Rich Arland" <k7sz@...>
To: "DrakeGroup@Yahoo" <drakeradio@yahoogroups.com>
Sent: Monday, February 04, 2013 3:20 PM
Subject: RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed

>
> 'Ya know...the very sad part about that is when I was stationed in the UK
> during the early 80s I had several RSGB Handbooks, one from the 1960s. Of
> course, to save weight when we moved back stateside, I sold or gave them
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> Dayton this year. Thanks for that tip, Paul.
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> Rich Arland, K7SZ
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> Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
> (4th ed)
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> BLOG: http://commobunker.blogspot.com/
>
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> To: DrakeRadio@yahoogroups.com
> From: elespe@...
> Date: Mon, 4 Feb 2013 09:04:55 -0600
> Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed
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>
> Rich
>
> Another must have in the BA library is RSGB handbook from the era
>
> Paul K0UYA
>
> ----- Original Message -----
>
> From: "Rich Arland" k7sz@...>
>
> To: "DrakeGroup@Yahoo" drakeradio@yahoogroups.com>
>
> Sent: Sunday, February 03, 2013 11:16 PM
>
> Subject: RE: [DrakeRadio] 1960-to-1966 Radio Handbook needed
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>> Ethan:
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>> Thanks for the tip. Just ordered a 1967 editon for $35 from Abe. Good
>
>> call!!!
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>
>> Rich Arland, K7SZ

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>
>> Dacula, GA
>
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>
>> Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
>
>> (4th ed)
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>> BLOG: http://commobunker.blogspot.com/
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>
>> To: DrakeRadio@yahoogroups.com
>
>> From: ethan.blanton@...
>
>> Date: Sun, 3 Feb 2013 23:07:40 -0500
>
>> Subject: Re: [DrakeRadio] 1960-to-1966 Radio Handbook needed
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>> Rich Arland spake unto us the following wisdom:
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>>> I have a 1951 edition of The Radio Handbook, by Editors and Engineers.
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>>
>
>>> It is in tatters. Totally falling apart. I had two other editions,
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>>> both from the 1960s but they have disappeared apparently during the
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>>> move from PA to GA.
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>> What a great book!
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>>> Anyone out there have a more current copy of this book, say somewhere
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>
>>> between 1960 and 1966, that they would be willing to part with? If so,
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>>> please contact me off-list and we'll see if we can't do a deal.
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>> You might want to check ABE Books (http://www.abebooks.com/), I have
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>> purchased both a 16th and 17th edition there for fair prices.
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>> Ethan
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11697. Re: Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 19:35:00 UTC
From: ko4bg
Topic: 11681 Message: 11697

Carl, no I'm not sure of much of anything anymore, I'm just a broke down Old Vietnam Vet and half ended Guitar Picker, that loves Drakes and has a pretty good collection of them. I just know it works great on the TR7 and also all of my Tube type Drakes. And the manual says that pin 1 & 4 are hooked together. Really I'm just a Dumb Old Guy that has way more Drakes than I need!!!!
Woody
--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
>
>
> ko4bg1@... writes:
>
> I have it wired with the two wire hook up as I only work VOX, it keys up
> and I can talk with it but it doesn't do a good job, it doesn't have the
> punch that it should have. Anyone have any suggestions?
> "Woody" KO4BG
> You sure that rig doesn't want to see a grounded ptt line when using the
> two wires and vox switch?
> Carl wd8nhk
>
> [Non-text portions of this message have been removed]
>

11698. Re: [DrakeRadio] Re: Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 20:14:27 UTC
From: Chgypsy@...
Topic: 11681 Message: 11698

, ko4bg1@... writes:

Carl, no I'm not sure of much of anything anymore, I'm just a broke down Old Vietnam Vet and half ended Guitar Picker, that loves Drakes and has a pretty good collection of them. I just know it works great on the TR7 and also all of my Tube type Drakes. And the manual says that pin 1 & 4 are hooked together. Really I'm just a Dumb Old Guy that has way more Drakes than I need!!!!
Woody
Well Woody, from an older (geez I hate to say that) Korean vet who has really forgotten more....." what was I going to say?"
And I'll just bet you are not broke down yet.

Pin 1 is audio in (and yes hooked to 4 internally). Pin 3 is mike ground. Mike when you hit ptt took pin 2 and grounded through pin 3.
As you are running VOX and you have to have the VOX switch on the box in that position TR5, I normally leave the ptt grounded (my mike) while yakking on the audio and ground lines.

If it is an operational thing on your mike and you have a particularly deep voice you might want to install a small capacitor on the audio out line.
Carl wd8nhk

PS I have what I feel is a rather nice set up of Drake gear too........

[Non-text portions of this message have been removed]

11699. Re: [DrakeRadio] Re: Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 20:18:08 UTC
From: Garey Barrell
Topic: 11681 Message: 11699

Woody -

The TR-5 uses Pin 1 or Pin 4 for the 'hot' mic lead, and Pin 3 for the shield (Ground return). Pin
2 is for the PTT.

The MIC input is designed for high impedance microphones.

The Astatic 10-DA is a dynamic microphone, designed for a 40k ohm input impedance, with an output 6
dB below (1/2) of the output of a D-104. I've never owned a TR-5 but I would imagine that the MIC
input circuitry is probably similar to that of the TR-7.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

ko4bg wrote:
>
>
> Carl, no I'm not sure of much of anything anymore, I'm just a broke down Old Vietnam Vet and half ended Guitar Picker, that loves Drakes and has a pretty good collection of them. I just know it works great on the TR7 and also all of my Tube type Drakes. And the manual says that pin 1 & 4 are hooked together. Really I'm just a Dumb Old Guy that has way more Drakes than I need!!!!
> Woody
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>>
>>
>> ko4bg1@... writes:
>>
>> I have it wired with the two wire hook up as I only work VOX, it keys up
>> and I can talk with it but it doesn't do a good job, it doesn't have the
>> punch that it should have. Anyone have any suggestions?
>> "Woody" KO4BG
>> You sure that rig doesn't want to see a grounded ptt line when using the
>> two wires and vox switch?
>> Carl wd8nhk
>>
>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11700. Re: [DrakeRadio] Re: Astatic 10 DA Mic on TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 20:26:28 UTC
From: Chgypsy@...
Topic: 11681 Message: 11700

Sorry for the reply to the list folks, I didn't really look. Carl wd8nhk

[Non-text portions of this message have been removed]

11701. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 20:34:00 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 11701

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

11702. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 20:59:36 UTC
From: Fred or Ski
Topic: 11540 Message: 11702

Hello List,

I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window.
What is the hole size and maybe I will order a red 'noggie' and install one.
Everyone should have a red 'noggie' that doesn't have one!

73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

11703. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 21:11:35 UTC
From: Bernie
Topic: 11540 Message: 11703

Ski - I pulled this from the 2bradioparts.com page. Looks like it requires a numbered bit set. Bernie in ND WD0GMD

Red Dial Glass Adjustment Pins

Pin Stem (Bottom OD .1165 +/- .0005")

(Very snug push in fit to a #32 drill hole)

(Pins Have An Upper OD of .180" +/- .002")

Fits Most Drake Dial Glass Windows

Most dial glasses have the .1165" OD hole +/- .0005"

----- Original Message -----
From: Fred or Ski
To: DrakeRadio@yahoogroups.com
Sent: Monday, February 04, 2013 2:59 PM
Subject: Re: [DrakeRadio] Drake 2B Restoration

Hello List,

I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window. What is the hole size and maybe I will order a red 'noggie' and install one.
Everyone should have a red 'noggie' that doesn't have one!

73,

Ski-WB8YXI

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[Non-text portions of this message have been removed]

11704. Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 21:31:14 UTC
From: Les Zwiebel
Topic: 11540 Message: 11704

Mine has a red noogie and I am very proud of it, even though it has faded some with age. So have I. So, I'll probably keep it.
Somehow, I don't see a p/n for "Noogie, red."
(((73)))
Les

-----Original Message-----
From: Fred or Ski <wb8yxi@...>
Sender: DrakeRadio@yahoogroups.com
Date: Mon, 4 Feb 2013 12:59:36
To: DrakeRadio@yahoogroups.com<DrakeRadio@yahoogroups.com>
Reply-To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake 2B Restoration

Hello List,
?
I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window.?
What is the hole size and maybe I will order a red 'noggie' and install one.
Everyone should have a red 'noggie' that doesn't have one!
?
73,
?
Ski-WB8YXI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11705. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 21:53:46 UTC
From: Fred or Ski
Topic: 11540 Message: 11705

Maybe I should have spelled it "NOOGIE" instead of noggie? Maybe there is a difference.....
Does anybody really know for sure?

But seriously though, thanks for the input.

73,

Ski

[Non-text portions of this message have been removed]

11706. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 22:10:10 UTC
From: Don Adams
Topic: 11540 Message: 11706

Just make the red dial calibrator hole the same slightly smaller than the "noogie".

--- On Mon, 2/4/13, Fred or Ski <wb8yxi@...> wrote:

From: Fred or Ski <wb8yxi@...>
Subject: Re: [DrakeRadio] Drake 2B Restoration
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Date: Monday, February 4, 2013, 3:59 PM

Hello List,

I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window.
What is the hole size and maybe I will order a red 'noggie' and install one.
Everyone should have a red 'noggie' that doesn't have one!

73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11707. RE: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-04 23:44:31 UTC
From: Rich Arland
Topic: 11540 Message: 11707

I totally agree, Bernie!!! You ain't nuttin' if you ain't got a "red noogie"!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

To: DrakeRadio@yahoogroups.com
From: donsadam2000@...
Date: Mon, 4 Feb 2013 14:10:10 -0800
Subject: Re: [DrakeRadio] Drake 2B Restoration

Just make the red dial calibrator hole the same slightly smaller than the "noogie".

--- On Mon, 2/4/13, Fred or Ski wb8yxi@...> wrote:

From: Fred or Ski wb8yxi@...>

Subject: Re: [DrakeRadio] Drake 2B Restoration

To: "DrakeRadio@yahoogroups.com" DrakeRadio@yahoogroups.com>

Date: Monday, February 4, 2013, 3:59 PM

Hello List,

I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window. What is the hole size and maybe I will order a red 'noggie' and install one.

Everyone should have a red 'noggie' that doesn't have one!

73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11708. Re: [DrakeRadio] File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 00:05:33 UTC
From: Jim Lowman
Topic: 206 Message: 11708

If the desired result is to have all replies go to the list, why no change the setting that forces that to happen?
Just an idea...

73 de Jim - AD6CW

On 2/4/2013 12:34 PM, DrakeRadio@yahoogroups.com wrote:
> PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.
>
>
> 73, Garey - K4OAH
>

11709. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 01:18:09 UTC
From: George- K4GM
Topic: 11677 Message: 11709

Thanks, Garey. I checked Q3 and here is what I found:

With the TR-4C controlling the base is .63v, the collector is 25.4v,
and the emitter is zero.

With the RV-4C controlling the base is .49v, the collector is 8.3v and
the emitter is zero.

The red lights function correctly.

Time to order a new Q3 ??

George K4GM

> Garey Barrell <mailto:k4oah@...>
> Sunday, February 03, 2013 11:09 PM
>
> Check Q3 (PTO supply 11VDC). The Collector should be 11V when the
> RV-4C is supposed to be the
> controlling PTO, and the red light on the RV-4C should be ON. The Base
> of Q3 should be near 0in
> this situation.
>
> When the TR-4Cis controlling, the red light on the RV-4C should be
> OUT, the Base of Q3 should be
> +0.6 VDC, and the Collector should be near 0.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> George- K4GM wrote:
> > Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although it
> > powers up with dial light and red neon bulb, there is no signal
> > arriving at the TR4Cw in any of the switch positions. I don't have a
> > 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD so
> > will measure voltages and resistance but was curious if there are any
> > known common problems with the RV4C or the cables etc. The TR4Cw is
> > working fine by itself. Any thoughts appreciated.
> >
> > George K4GM
> >
> >

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> > Yahoo! Groups Links
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>
> George- K4GM <mailto:k4gm@...>
> Sunday, February 03, 2013 8:56 PM
> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although
> it powers up with dial light and red neon bulb, there is no signal
> arriving at the TR4Cw in any of the switch positions. I don't have a
> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD
> so will measure voltages and resistance but was curious if there are
> any known common problems with the RV4C or the cables etc. The TR4Cw
> is working fine by itself. Any thoughts appreciated.
>
> George K4GM

[Non-text portions of this message have been removed]

11710. TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 01:29:39 UTC
From: Rich Arland
Topic: 11710 Message: 11710

I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a pricing guide.

So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".

2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.

Thanks, gang....this is one COOL group!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

(Red Noogie guru!)

[Non-text portions of this message have been removed]

11711. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 01:41:22 UTC
From: George- K4GM
Topic: 11710 Message: 11711

Do you work a lot of cw? If so the plain vanilla TR4 is not for you.
The MS-4 speaker will house the AC4 power supply. Plan on upgrading the
AC4 PSU to an AC4-R . Simple job and fun.

73, George k4GM

> Rich Arland <mailto:k7sz@...>
> Monday, February 04, 2013 8:29 PM
>
>
> I have been presesnted with a chance to pick up a TR-4 (no PSU). I
> hate using e-bay as a pricing guide.
>
> So, my question to the group: What does a TR-4 go for now days?? This
> is an un-tried rig. Not sure it works. Decent cosmetics, however, the
> previous owner said that the last time he had it plugged in that the
> rig didn't transmit. There is a TX/RX switch on the back (if I recall)
> and maybe that was in the wrong position, although I don't know for
> sure and he doesn't remember. There is no PSU (he sold it), so no way
> to ck it out prior to "doing the deal".
>
> 2nd question: How much for an AC-4? I know that there is a speaker
> enclosure that can house the AC-4, need nomenclature and an
> apporximate cost.
>
> Thanks, gang....this is one COOL group!
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of
> QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> (Red Noogie guru!)
>
>
>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11712. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 01:43:31 UTC
From: Jim Wiley
Topic: 11710 Message: 11712

The speaker that also holds the PSU is the MS-4. It IS possible to build a workable PSU from something like an old Heath HP-23, plus a few parts, which can be hidden inside the MS-4, but finding a proper AC-4 is better.

- Jim, KL7CC

On 2/4/2013 4:29 PM, Rich Arland wrote:
>
>
> I have been presesnted with a chance to pick up a TR-4 (no PSU). I
> hate using e-bay as a pricing guide.
>
> So, my question to the group: What does a TR-4 go for now days?? This
> is an un-tried rig. Not sure it works. Decent cosmetics, however, the
> previous owner said that the last time he had it plugged in that the
> rig didn't transmit. There is a TX/RX switch on the back (if I recall)
> and maybe that was in the wrong position, although I don't know for
> sure and he doesn't remember. There is no PSU (he sold it), so no way
> to ck it out prior to "doing the deal".
>
> 2nd question: How much for an AC-4? I know that there is a speaker
> enclosure that can house the AC-4, need nomenclature and an
> apporximate cost.
>
> Thanks, gang....this is one COOL group!
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of
> QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> (Red Noogie guru!)
>
>
>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11713. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 01:59:55 UTC
From: Paul Pollock
Topic: 11710 Message: 11713

To Richard Arland K7SZ,

I bought a TR-4 used, from a friend of mine, some time ago. Maybe my story will be helpful.

In my case, I got the radio (sort of working), an MS-4 speaker (good shape) and an AC-4 power supply (humming) in the same deal (I was lucky). Cost, all told, was $500.

Firstly, I sent the radio out to Jeff Covelli (a champion Drake tech, and a true gentleman). I got it back looking and working better than new. With the shipping, the overhaul cost me about $310, Jeff pays for return shipping.

Secondly, while the radio was out being refurbished, I purchased the AC-4r repair kit from "The Heathkit Shop", and installed that myself. If it has not been done in the last few years, it's mandatory. An old power supply, for a radio of this type, needs a thorough rebuild. When I first got the package, I was getting AC-hum from the radio audio. AC-4 rebuild, killed the hum, and ran the radio as it should. Cost of the AC-4r kit was around $85, but that was several years ago.

Total cost about $900. Believe me, getting one used and in running shape is as rare as teeth on a female pan-fish. Drakes are all quite venerable, so expect to have some repairs to do.

In your terms, if I were offered your opportunity, with no knowledge of basic condition, no power supply, no speaker; I would expect the same kind of things to do that I went through. And we haven't even gotten to the point of looking at the stuff you need to use the radio. A working, but not overhauled AC-4 is going for $125-200 on EBay. A good working MS-4 speaker will cost between $75-100, or in that ballpark. In your case, I would not pay more than $150-200 for the TR-4, unless the radio was "known" good. If the radio were a TR-4cw/rit, that's different, a pile of junk is worth $300-350 (and one in good working shape is worth more).

These ideas are my own, alone. Others will have other ideas. All of them will be relevant. Since all that, I used the radio for a while, but have since put the radio aside, for one of my solid-state radios, to preserve the TR-4 for conditions I think will come in the future.

Oh, and before I forget, the switch TRANS/RECEIVE, is strictly for receiving, it is used in cases where the user want to use an outboard receiver with the TR-4.

Hope that helps you, have fun and good luck!

-Paul Pollock
KD7BWB

On Feb 4, 2013, at 6:29 PM, Rich Arland wrote:

>
> I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a

pricing guide.
>
> So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".
>
> 2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.
>
> Thanks, gang....this is one COOL group!
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> (Red Noogie guru!)
>
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11714. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 02:04:21 UTC
From: Dan Galligan
Topic: 11710 Message: 11714

Rich,
Personally, I wouldn't pay more than $300, for an unknown, TR-4, with likely issues, that doesnt include the AC-4, and would start by offering $200, less, if it is not in "presentable" condition. There are too many things that 'could' be wrong with it, that can be costly.
That being said, I would happily pay $600, for a known good one, with little or no cosmetic issues, and would expect that it should at least include an AC-4, though would not expect it to have the AR-4R kit installed, for that price.
The problem is, there are too many variables that would impact it's value, and then, you must decide what it's value is, to you. I have one, here, that I am slowly working on, for a friend, and it is not going well. I am likely to make him an offer of about $400 for it, then send it to Jeff Covelli, as I am stumped. It does have an ugly AC-4, and the Hayseed rebuild kit for the AC-4. I know it to put out full power, but the receive is negligible, and I can't seem to finger out the issue, with the receive.
Keep in mind, that you may get off with a cheap fix, if it has issues, and you come out a winner. If it costs you another $400, to fix it, you'll be happy that you got it as inexpensively as possible.
I know I likely raised more questions than answers, but that's the problem, when buying a radio, with unknown issues. Keep your up-front costs as low as possible, so you can afford to fix it right, when it needs repairs.

73,
Dan
W3RXO/W6
Pomona, CA

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 4, 2013, at 5:29 PM, Rich Arland <k7sz@...> wrote:

>
> I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a pricing guide.
>
> So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".
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11715. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 02:56:38 UTC
From: Kris Merschrod
Topic: 11710 Message: 11715

Rich, it is a pig in a poke. So go easy. One sobering through is that if you need to re-tube it that will be about $200. Yes, tunes are not inexpensive.

"Will not transmit" could be simple, could be complex. If it is a plain old TR-4 - fine to shoot the breeze with - CW can be done and was all the time, but there are better TR-4 models.

I would err on the conservative side - perhaps $100-150. I am not a tight wad, but a lot could go into it. If you could bring an AC-4 along to test it - at least for reception, that would help out.

Good luck and keep us posted. A friend bought one at a certain exit on the Jersey Turnpike, and he had a great story to tell!

Kris KM2KM
----- Original Message -----
From: Rich Arland
To: DrakeGroup@Yahoo
Sent: Monday, February 04, 2013 8:29 PM
Subject: [DrakeRadio] TR-4 Price??

I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a pricing guide.

So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".

2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.

Thanks, gang....this is one COOL group!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

(Red Noogie guru!)

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11716. SPR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 02:59:11 UTC
From: andylingham29
Topic: 5625 Message: 11716

Pse let me know if there are any groups that discuss the restoration of Drake SPR4 - Tnx Andy 9M2PV

11717. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 03:07:44 UTC
From: Garey Barrell
Topic: 11677 Message: 11717

Yep, Q3 is toast. There may be another problem aswell... The Collector voltage should be 11 VDC
with the Base less than 0.6V. The 27.4 VDC you are reading indicates that the Zener inside the PTO
may be open.

Need to determine the version. The collector resistorfor Q3 ... Is it a 2W carbon or 5.25W power
resistor?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George- K4GM wrote:
> Thanks, Garey. I checked Q3 and here is what I found:
>
> With the TR-4C controlling the base is .63v, the collector is 25.4v,
> and the emitter is zero.
>
> With the RV-4C controlling the base is .49v, the collector is 8.3v and
> the emitter is zero.
>
> The red lights function correctly.
>
> Time to order a new Q3 ??
>
> George K4GM
>
>> Garey Barrell<mailto:k4oah@...>
>> Sunday, February 03, 2013 11:09 PM
>>
>> Check Q3 (PTO supply 11VDC). The Collector should be 11V when the
>> RV-4C is supposed to be the
>> controlling PTO, and the red light on the RV-4C should be ON. The Base
>> of Q3 should be near 0in
>> this situation.
>>
>> When the TR-4Cis controlling, the red light on the RV-4C should be
>> OUT, the Base of Q3 should be
>> +0.6 VDC, and the Collector should be near 0.
>>
>> 73, Garey - K4OAH

>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> George- K4GM wrote:
>>> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although it
>>> powers up with dial light and red neon bulb, there is no signal
>>> arriving at the TR4Cw in any of the switch positions. I don't have a
>>> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD so
>>> will measure voltages and resistance but was curious if there are any
>>> known common problems with the RV4C or the cables etc. The TR4Cw is
>>> working fine by itself. Any thoughts appreciated.
>>>
>>> George K4GM
>>>
>>>
>>> ------------------------------------
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>>> Yahoo! Groups Links
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>> George- K4GM<mailto:k4gm@...>
>> Sunday, February 03, 2013 8:56 PM
>> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although
>> it powers up with dial light and red neon bulb, there is no signal
>> arriving at the TR4Cw in any of the switch positions. I don't have a
>> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD
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>> is working fine by itself. Any thoughts appreciated.
>>
>> George K4GM
> [Non-text portions of this message have been removed]
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11718. RE: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 03:15:05 UTC
From: Rich Arland
Topic: 11710 Message: 11718

> Good luck and keep us posted. A friend bought one at a certain exit on the Jersey Turnpike, and he had a great story to tell!

Let me guess.....Tony Sopranio, right??

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

"RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: kris@...
Date: Mon, 4 Feb 2013 21:56:38 -0500
Subject: Re: [DrakeRadio] TR-4 Price??

Rich, it is a pig in a poke. So go easy. One sobering through is that if you need to re-tube it that will be about $200. Yes, tunes are not inexpensive.

"Will not transmit" could be simple, could be complex. If it is a plain old TR-4 - fine to shoot the breeze with - CW can be done and was all the time, but there are better TR-4 models.

I would err on the conservative side - perhaps $100-150. I am not a tight wad, but a lot could go into it. If you could bring an AC-4 along to test it - at least for reception, that would help out.

Good luck and keep us posted. A friend bought one at a certain exit on the Jersey Turnpike, and he had a great story to tell!

Kris KM2KM

[Non-text portions of this message have been removed]

11719. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 03:42:07 UTC
From: Don Cunningham
Topic: 11710 Message: 11719

Rich,

I usually don't chime in on these price requests, but you are getting some high prices more like Ebay. The last answer ($100 to 150) is more like the offer I would make on a pig in a poke TR-4. The other prices you are getting are more the price for a TR4C to me. In fact, I bought a VERY nice TR4C with the extra 10M crystals and added a nice RV4C remote VFO to it for much less than $500 less than 5 years ago. I had an AC4, so I didn't get that or the MS-4 speaker. If you get the remote VFO, it has the speaker built in as well. Nice for casual use, but the twins are much better for steady use, IMHO.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11720. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:21:58 UTC
From: George- K4GM
Topic: 11677 Message: 11720

Looks like a power resistor to me. Appears to be wire wound on a ceramic form encased in brown ceramic. There is a hole through the center from end to end. There is only one silver stripe on the end indicating 10% tolerance I suppose. It is a little smaller than the three carbon resistors on the same board which have the usual stripe color codes. Funny thing is that I received original Drake documentation with the RV-4C and on the schematic it shows the collector resistor as a 2 watt 15k. There is the number 20563 stamped on the rear of the chassis which I assume is a serial number?? Thanks for the assistance.

73, George K4GM
> Garey Barrell <mailto:k4oah@...>
> Monday, February 04, 2013 10:07 PM
> Yep, Q3 is toast. There may be another problem aswell... The Collector
> voltage should be 11 VDC
> with the Base less than 0.6V. The 27.4 VDC you are reading indicates
> that the Zener inside the PTO
> may be open.
>
> Need to determine the version. The collector resistorfor Q3 ... Is it
> a 2W carbon or 5.25W power
> resistor?
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> <www.k4oah.com>
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> Yahoo! Groups Links
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> George- K4GM <mailto:k4gm@...>
> Monday, February 04, 2013 8:18 PM
> Thanks, Garey. I checked Q3 and here is what I found:
>
> With the TR-4C controlling the base is .63v, the collector is 25.4v,
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>
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> George K4GM
>
> Garey Barrell <mailto:k4oah@...>
> Sunday, February 03, 2013 11:09 PM
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> OUT, the Base of Q3 should be
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> >
> > George K4GM
> >
> >
> > ------------------------------------
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> > Yahoo! Groups Links
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>
> George- K4GM <mailto:k4gm@...>
> Sunday, February 03, 2013 8:56 PM
> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although
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> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD
> so will measure voltages and resistance but was curious if there are
> any known common problems with the RV4C or the cables etc. The TR4Cw
> is working fine by itself. Any thoughts appreciated.
>
> George K4GM

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11721. Okay, I just bought this one

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:22:17 UTC
From: Dan Galligan
Topic: 11721 Message: 11721

I just made a deal to buy this TR-4, with 2-AC-4's. One working, one not, but including the new Hayseed AC-4 rebuild kit, for $300. The one not working, is only not working because of a hack job, of a repair. But, it doesn't have a cover. With new caps, it should be good as new. The ugly, but working one, looks like the case got smashed, then was pounded out, into something resembling being in shape, but lumpy as cottage cheese, on one side and top, with a tear in the aluminum, that now overlaps.

The TR-4, is going to be headed off to Jeff Covelli, by next week. Since I have 2 AC-4's, and one rebuild kit, I will have a spare. I don't think I want to sell it, but it is missing the cover. Anyone have a line on an AC-4 cover, or two? I figure to rebuild the ugly one, with the Hayseed kit, and get the Heathkit Shop kit, for the second one, that's missing the cover, altogether.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

11722. Re: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:33:15 UTC
From: vacuuminded2@...
Topic: 11710 Message: 11722

I agree with Don's sentiments.
Presuming the radio is in cosmetically good to excellent condition, and has not been hacked up by somebody with a golden screwdriver, I wouldn't pay a penny more than $150 knowing it was NOT working when parked. You have to assume the worst in these situations, if the 3 6JB6's alone are shot you're looking at another C note unless you stumble upon some for a steal. If it has the noise blanker option installed, (you have to look through the cover, don't be fooled simply by presence of the NB switch on the front panel), maybe $200. Download a copy of the manual and study the pictures before looking at the radio- we've all brought some piece of equipment home only to later discover somebody added a switch in the font panel, hacked up the chassis in a semi-professional manner, or something else that made it much worth much less than the "bargain" we thought we got.

AC-3 and AC-4 power supplies are around, expect to pay $100 or more for an as-is, but unmolested one. I have an AC-3 that I could probably be talked out of, should you strike out elsewhere.

Of course bargains are still out there, two years ago I bought an AC-4 in the MS-4 speaker cabinet at a hamfest for $50. Spotted it early in the morning, kept wandering by and never saw the seller at his table. Around noon when everyone was leaving, I caught him as he was nearly done packing up. Asked if he still had the speaker, and he dug it back out. Never had a radio, just the supply/speaker. I asked how much, he said $50, and we both left very happy campers!

Don't know what's been up with Drake stuff on ePay the last few years. Maybe it's just a peak in the market, maybe they're just finally getting the recognition they deserve.. Ask different people, you'll get different answers. In either event, buyer beware, ask lots of questions, and request pictures.

Good luck-
Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Feb 4, 2013, at 9:42 PM, "Don Cunningham" <donc@martineer.net> wrote:

> Rich,
>
> I usually don't chime in on these price requests, but you are getting some high prices more like Ebay. The last answer ($100 to 150) is more like the offer I would make on a pig in a poke TR-4. The other prices you are getting are more the price for a TR4C to me. In fact, I bought a VERY nice TR4C with the extra 10M crystals and added a nice RV4C remote VFO to it for much less than $500 less than 5 years ago. I had an AC4, so I didn't get that or the MS-4 speaker. If you get the remote VFO, it has the speaker built in as well. Nice for casual use, but the twins are much better for steady use, IMHO.
> 73,
> Don, WB5HAK

>
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11723. Re: [DrakeRadio] Okay, I just bought this one

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:35:59 UTC
From: Dan Galligan
Topic: 11721 Message: 11723

BTW,
Those who said that some of us overpriced the other TR-4, in question, were probably right. I elevated my estimate, because I didn't want to look like a total cheapskate.
The owner of the one I am buying, offered it for $250, but he's gotten the short end of a couple of other deals, so I insisted on paying $300. He's a real generous guy, and has far more than $350, into the radio, 2 AC-4's, and an AC-4 re-Cap kit. He's a GOOD friend, and I couldn't let him take it in the shorts, that badly.

Dan

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 4, 2013, at 8:22 PM, Dan Galligan <w3rxo@...> wrote:

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> The TR-4, is going to be headed off to Jeff Covelli, by next week. Since I have 2 AC-4's, and one rebuild kit, I will have a spare. I don't think I want to sell it, but it is missing the cover. Anyone have a line on an AC-4 cover, or two? I figure to rebuild the ugly one, with the Hayseed kit, and get the Heathkit Shop kit, for the second one, that's missing the cover, altogether.
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[Non-text portions of this message have been removed]

11724. RE: [DrakeRadio] TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:44:20 UTC
From: Rich Arland
Topic: 11710 Message: 11724

Tnx to all who have responded. That is why I like this group.

I will download the manual, do some homework, and be prepared to haggle. I'd like a TR-4 or 4C just for general SSB work. Nothing serious. Several years ago I had a chance to get a TR-4CW w/NB in exchange for a Yeasu FT-1500!! I, of course, did the deal, but never used the rig. Sold it about 4-5 months later as we needed money to do the move from PA to GA. Man, do I wish I still had that radio/PSU.

Again, thanks, gang. I appreciate all the info/help.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: vacuuminded2@yahoo.com
Date: Mon, 4 Feb 2013 22:33:15 -0600
Subject: Re: [DrakeRadio] TR-4 Price??

I agree with Don's sentiments.

Presuming the radio is in cosmetically good to excellent condition, and has not been hacked up by somebody with a golden screwdriver, I wouldn't pay a penny more than $150 knowing it was NOT working when parked. You have to assume the worst in these situations, if the 3 6JB6's alone are shot you're looking at another C note unless you stumble upon some for a steal. If it has the noise blanker option installed, (you have to look through the cover, don't be fooled simply by presence of the NB switch on the front panel), maybe $200. Download a copy of the manual and study the pictures before looking at the radio- we've all brought some piece of equipment home only to later discover somebody added a switch in the font panel, hacked up the chassis in a semi-professional manner, or something else that made it much worth much less than the "bargain" we thought we got.

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Good luck-

Regards,

Chris kc9ieq

Sent from my outdated iPhone wireless thingy

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> Rich,

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> 73,

> Don, WB5HAK

>

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[Non-text portions of this message have been removed]

11725. Re: TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:49:28 UTC
From: qrper
Topic: 11710 Message: 11725

Rich!

Come on, fess up, you got the money. Spend some of it before it rots away in your pocket.

Most the prices guys were stating are pretty much in line with what I've spent.

I spent about $250 for a TR4CW several years ago and while it's slanted toward the cw op (thus the name! Duh!) it's not my cup of tea and now proudly sits on the floor of the shack.

Tubes are not that expensive. Granted the sweep tubes in the PA are, the 6HS6 can be but most are $3 to $5 bucks a copy. Now that being said, don't you dare run out and buy a tube set for one. First off, it won't fix a broke radio, and second, if you put in new tubes then the alignment will be so far out of whack, it will take you a month to get it back close.

if you can, look at the rack and see if the seals have been broken, if they are, it's good bet someone has been tweaking on the slug and things could be seriously screwed up.

Filter caps, most film capacitors, then the electrolytics should be replaced one at a time.

check the cathode resistors on the PA tubes. Check the screen resistors on the PA tubes. You don't need to break out the VOM, just look at 'em if possible. You've been around the block enough to know what a toasty resistor looks like.

Check things like the PTO gears. Does the pto turn smoothly? Backlash?

Most high value resistors usually drift up in value. Check a few and change as needed.

Clean tube sockets, controls and so on.

Call me when you need the AC4R power supply upgrade, and no you can't use a heathkit HP23 series supply, the plate voltage is way too high.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:
>
>
> I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a pricing guide.
>
> So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".

>
> 2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.
>
> Thanks, gang....this is one COOL group!
>
> Rich Arland, K7SZ
> Dacula, GA

11726. RE: [DrakeRadio] Re: TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:59:39 UTC
From: Rich Arland
Topic: 11710 Message: 11726

Hi Mikey:

As usual, you keep me grounded!! Thanks, Pard.

Hey, you wanna unload that TR-4CW? If so, lemme know and we'll do some business at FDIM/DAYTON. Seriously, Pard, I had a TR-4CW/PSU in trade for a Yaesu FT-1500 2M FM rig! Had it for 4-5 months and sold it to finance the move from PA to GA. Always wanted to try that rig out but never really had a chance.

Tnx for all the info. I have archived that e-mail and will use it when I eval the TR-4. Allegedly, the guy I am getting it from works with the guy who originally had it. The deal was that my guy (N4KD) was told by the owner that it would be "free" IF he took a Swan 350 also!! I told N4KD that I would take all the Swan 350s this guy had and trade them at Dayton. There are actually people out there that collect these rigs!! Had one in Japan (KA2AA) in the 70s and it was a hoot to use...they didn't call them "Swan Three-Drifties" for nothing!!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

"RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Tue, 5 Feb 2013 04:49:28 +0000
Subject: [DrakeRadio] Re: TR-4 Price??

Rich!

Come on, fess up, you got the money. Spend some of it before it rots away in your pocket.

Most the prices guys were stating are pretty much in line with what I've spent.

I spent about $250 for a TR4CW several years ago and while it's slanted toward the cw op (thus the name! Duh!) it's not my cup of tea and now proudly sits on the floor of the shack.

Tubes are not that expensive. Granted the sweep tubes in the PA are, the 6HS6 can be but most are $3 to $5 bucks a copy. Now that being said, don't you dare run out and buy a tube set for one. First off, it won't fix a broke radio, and second, if you put in new tubes then the alignment will be so far out of whack, it will take you a month to get it back close.

if you can, look at the rack and see if the seals have been broken, if they are, it's good bet someone has been tweaking on the slug and things could be seriously screwed up.

Filter caps, most film capacitors, then the electrolytics should be replaced one at a time.

check the cathode resistors on the PA tubes. Check the screen resistors on the PA tubes. You don't need to break out the VOM, just look at 'em if possible. You've been around the block enough to know what a toasty resistor looks like.

Check things like the PTO gears. Does the pto turn smoothly? Backlash?

Most high value resistors usually drift up in value. Check a few and change as needed.

Clean tube sockets, controls and so on.

Call me when you need the AC4R power supply upgrade, and no you can't use a heathkit HP23 series supply, the plate voltage is way too high.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:

>

>

> I have been presesnted with a chance to pick up a TR-4 (no PSU). I hate using e-bay as a pricing guide.

>

> So, my question to the group: What does a TR-4 go for now days?? This is an un-tried rig. Not sure it works. Decent cosmetics, however, the previous owner said that the last time he had it plugged in that the rig didn't transmit. There is a TX/RX switch on the back (if I recall) and maybe that was in the wrong position, although I don't know for sure and he doesn't remember. There is no PSU (he sold it), so no way to ck it out prior to "doing the deal".

>

> 2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.

>

> Thanks, gang....this is one COOL group!

>

> Rich Arland, K7SZ

> Dacula, GA

[Non-text portions of this message have been removed]

11727. 2B Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 04:22:32 UTC
From: Mark Brueggemann
Topic: 11727 Message: 11727

Been casually looking around for a tuning knob for a 2B for a while and nothing's turned up. The one I have the chrome ring is rusted. I could entertain getting it re-plated but if used/good ones are around that'd be the direct route.

Any leads where I can find one? Thanks.

Mark K5LXP
Albuquerque, NM

11728. MN-1000 main tuning knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 08:41:34 UTC
From: Jim Larsen
Topic: 11727 Message: 11728

I am in need of a band switch knob for my MN-2000.

Can anyone help?

I was lucky to recently acquired a Drake TR4-CW & PS, RV-4C, MN-2000, C-4 and L4B. None have been restored yet but I am excited to see if I can get it all back on the air.

Thanks in advance.

Jim

Jim Larsen, AL7FS
Anchorage Alaska
907-345-3190
http://www.AL7FS.us/

11729. Re: [DrakeRadio] SPR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 11:42:53 UTC
From: Steve Wedge
Topic: 5625 Message: 11729

Andy, any questions can be posed here: several of us have worked on them.

73,

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Feb 4, 2013, at 9:59 PM, "andylingham29" <pvlingham@...> wrote:

> Pse let me know if there are any groups that discuss the restoration of Drake SPR4 - Tnx Andy 9M2PV
>
>

[Non-text portions of this message have been removed]

11730. RE: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 12:54:12 UTC
From: Terrell Hamilton
Topic: 11540 Message: 11730

JTSTRS (just to set the record straight), Patrick "Red" Noogie was an Irish ham who got the nickname "Red" for his flaming red hair color(when he had hair), and was famed for convening the "Noogie-net," which catered to rag-chewing Irish Whiskey distillers who were Drake fans (not the kind that cools finals). Ridiculed for his insistence that the Ether theory was responsible for radio propagation, he became dispirited and left Ham Radio in 1961 to become a UFO researcher. Last sighted in Roswell, NM selling bumper stickers with the famous slogan "I want to believe," he disappeared into the (well, you know...). In his memory, Drake fans (not the kind that cools finals) everywhere began calling the red Dial Adjustment Pins "Noogies."

And now, you know the rest of the story...

Terry K7WLD

Wenatchee, WA

-----Original Message-----
From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Les Zwiebel
Sent: Monday, February 04, 2013 1:31 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Drake 2B Red Noogie

Mine has a red noogie and I am very proud of it, even though it has faded some with age. So have I. So, I'll probably keep it.

Somehow, I don't see a p/n for "Noogie, red."

(((73)))

Les

-----Original Message-----

From: Fred or Ski < <mailto:wb8yxi@...> wb8yxi@...>

Sender: DrakeRadio@yahoogroups.com

Date: Mon, 4 Feb 2013 12:59:36

To: DrakeRadio@yahoogroups.com<DrakeRadio@yahoogroups.com>

Reply-To: DrakeRadio@yahoogroups.com

Subject: Re: [DrakeRadio] Drake 2B Restoration

Hello List,

I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the dial window. What is the hole size and maybe I will order a red 'noggie' and install one.

Everyone should have a red 'noggie' that doesn't have one!

73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

Yahoo! Groups Links

<http://groups.yahoo.com/group/DrakeRadio/>
http://groups.yahoo.com/group/DrakeRadio/

Individual Email | Traditional

<http://groups.yahoo.com/group/DrakeRadio/join>
http://groups.yahoo.com/group/DrakeRadio/join

(Yahoo! ID required)

<mailto:DrakeRadio-digest@yahoogroups.com>
DrakeRadio-digest@yahoogroups.com

<mailto:DrakeRadio-fullfeatured@yahoogroups.com>
DrakeRadio-fullfeatured@yahoogroups.com

<mailto:DrakeRadio-unsubscribe@yahoogroups.com>
DrakeRadio-unsubscribe@yahoogroups.com

<http://docs.yahoo.com/info/terms/> http://docs.yahoo.com/info/terms/

[Non-text portions of this message have been removed]

11731. Re: [DrakeRadio] AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 14:07:00 UTC
From: Chgypsy@...
Topic: 11731 Message: 11731

_k7sz@..._ (mailto:k7sz@...) writes:

2nd question: How much for an AC-4? I know that there is a speaker enclosure that can house the AC-4, need nomenclature and an apporximate cost.
Rich Arland, K7SZ
Several have responded that the speaker housing is an MS4. There are 4 screw holes in the rear of the lower panel to hold the AC4. Do NOT ship as one unit, the MS4 cannot take the bouncing weight. Cost varies, based mainly on condition of the box.

The AC-4 as a generality will be between $50 and $100 (+ maybe) Depends on whether it has a power supply rebuild kit installed. One such example would be a Heathkit AC4-R. These are rather simple to install and you can google for a look see.
Good luck Carl wd8nhk

[Non-text portions of this message have been removed]

11732. Re: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 14:36:31 UTC
From: Dan Galligan
Topic: 11540 Message: 11732

Terry,
That's too funny. I enjoyed that laugh.
Thank you.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 5, 2013, at 4:54 AM, Terrell Hamilton <hamilter@...> wrote:

> JTSTRS (just to set the record straight), Patrick "Red" Noogie was an Irish
> ham who got the nickname "Red" for his flaming red hair color(when he had
> hair), and was famed for convening the "Noogie-net," which catered to
> rag-chewing Irish Whiskey distillers who were Drake fans (not the kind that
> cools finals). Ridiculed for his insistence that the Ether theory was
> responsible for radio propagation, he became dispirited and left Ham Radio
> in 1961 to become a UFO researcher. Last sighted in Roswell, NM selling
> bumper stickers with the famous slogan "I want to believe," he disappeared
> into the (well, you know...). In his memory, Drake fans (not the kind that
> cools finals) everywhere began calling the red Dial Adjustment Pins
> "Noogies."
>
>
>
> And now, you know the rest of the story...
>
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>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> -----Original Message-----
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Les Zwiebel
> Sent: Monday, February 04, 2013 1:31 PM
> To: DrakeRadio@yahoogroups.com

> Subject: [DrakeRadio] Drake 2B Red Noogie
>
>
>
> Mine has a red noogie and I am very proud of it, even though it has faded
> some with age. So have I. So, I'll probably keep it.
>
> Somehow, I don't see a p/n for "Noogie, red."
>
> (((73)))
>
> Les
>
>
>
> -----Original Message-----
>
> From: Fred or Ski < <mailto:wb8yxi@...> wb8yxi@...>
>
> Sender: DrakeRadio@yahoogroups.com
>
> Date: Mon, 4 Feb 2013 12:59:36
>
> To: DrakeRadio@yahoogroups.com<DrakeRadio@yahoogroups.com>
>
> Reply-To: DrakeRadio@yahoogroups.com
>
> Subject: Re: [DrakeRadio] Drake 2B Restoration
>
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>
> Hello List,
>
>
>
> I have a 2B S/N 2765 and it doesn't have a hole for a red 'noggie' in the
> dial window. What is the hole size and maybe I will order a red 'noggie'
> and install one.
>
> Everyone should have a red 'noggie' that doesn't have one!
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>
> 73,
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>
> Ski-WB8YXI

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> Yahoo! Groups Links
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>
> <http://groups.yahoo.com/group/DrakeRadio/>
> http://groups.yahoo.com/group/DrakeRadio/
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> Individual Email | Traditional
>
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>
> <http://groups.yahoo.com/group/DrakeRadio/join>
> http://groups.yahoo.com/group/DrakeRadio/join
>
> (Yahoo! ID required)
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>
> <mailto:DrakeRadio-digest@yahoogroups.com>
> DrakeRadio-digest@yahoogroups.com
>
> <mailto:DrakeRadio-fullfeatured@yahoogroups.com>
> DrakeRadio-fullfeatured@yahoogroups.com
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> <mailto:DrakeRadio-unsubscribe@yahoogroups.com>
> DrakeRadio-unsubscribe@yahoogroups.com
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11733. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 14:38:03 UTC
From: Garey Barrell
Topic: 11677 Message: 11733

George -

OK, that's an earlier schematic version and you have a late RV-4C. Attached is the correct manual/schematic from my service supplement CD.

I would suggest cutting the Collector lead of Q3 and measure the voltage at the input lead to the
PTO. As you can see, if it's much above 11V there is a problem inside the PTO. The 10V internal
Zener and/or the 10 uF electrolytic (C20) may have shorted. IF C20 shorts, R6 will overheat, going
upin value and eventually opening. Your 28 VDC reading makes me think the cap may be shorted.

Let me know what you find, or if I can help further.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George- K4GM wrote:
> Looks like a power resistor to me. Appears to be wire wound on a ceramic
> form encased in brown ceramic. There is a hole through the center from
> end to end. There is only one silver stripe on the end indicating 10%
> tolerance I suppose. It is a little smaller than the three carbon
> resistors on the same board which have the usual stripe color codes.
> Funny thing is that I received original Drake documentation with the
> RV-4C and on the schematic it shows the collector resistor as a 2 watt
> 15k. There is the number 20563 stamped on the rear of the chassis which
> I assume is a serial number?? Thanks for the assistance.
>
> 73, George K4GM
>> Garey Barrell <mailto:k4oah@...>
>> Monday, February 04, 2013 10:07 PM
>> Yep, Q3 is toast. There may be another problem aswell... The Collector
>> voltage should be 11 VDC
>> with the Base less than 0.6V. The 27.4 VDC you are reading indicates
>> that the Zener inside the PTO
>> may be open.
>>
>> Need to determine the version. The collector resistorfor Q3 ... Is it
>> a 2W carbon or 5.25W power
>> resistor?

>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> Yahoo! Groups Links
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>>
>> George- K4GM <mailto:k4gm@...>
>> Monday, February 04, 2013 8:18 PM
>> Thanks, Garey. I checked Q3 and here is what I found:
>>
>> With the TR-4C controlling the base is .63v, the collector is 25.4v,
>> and the emitter is zero.
>>
>> With the RV-4C controlling the base is .49v, the collector is 8.3v and
>> the emitter is zero.
>>
>> The red lights function correctly.
>>
>> Time to order a new Q3 ??
>>
>> George K4GM
>>
>> Garey Barrell <mailto:k4oah@...>
>> Sunday, February 03, 2013 11:09 PM
>>
>> Check Q3 (PTO supply 11VDC). The Collector should be 11V when the
>> RV-4C is supposed to be the
>> controlling PTO, and the red light on the RV-4C should be ON. The Base
>> of Q3 should be near 0in
>> this situation.
>>
>> When the TR-4Cis controlling, the red light on the RV-4C should be
>> OUT, the Base of Q3 should be
>> +0.6 VDC, and the Collector should be near 0.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

>> and TR-4/C Service Supplement CDs
>>
>>
>> George- K4GM wrote:
>>> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although it
>>> powers up with dial light and red neon bulb, there is no signal
>>> arriving at the TR4Cw in any of the switch positions. I don't have a
>>> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD so
>>> will measure voltages and resistance but was curious if there are any
>>> known common problems with the RV4C or the cables etc. The TR4Cw is
>>> working fine by itself. Any thoughts appreciated.
>>>
>>> George K4GM
>>>
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>>> ------------------------------------
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>>> Yahoo! Groups Links
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>>
>> George- K4GM <mailto:k4gm@...>
>> Sunday, February 03, 2013 8:56 PM
>> Recently acquired the RV4C for my TR4Cw/rit. Unfortunately, although
>> it powers up with dial light and red neon bulb, there is no signal
>> arriving at the TR4Cw in any of the switch positions. I don't have a
>> 12AU7 to swap so have not yet ruled out the tube. I have Garey's CD
>> so will measure voltages and resistance but was curious if there are
>> any known common problems with the RV4C or the cables etc. The TR4Cw
>> is working fine by itself. Any thoughts appreciated.
>>
>> George K4GM
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11734. Re: [DrakeRadio] 2B Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 14:58:38 UTC
From: Garey Barrell
Topic: 11727 Message: 11734

Mark -

One just sold last week for over $55 on eBay. They do NOT show up very often.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Brueggemann wrote:
> Been casually looking around for a tuning knob for a 2B for a while and nothing's turned up. The one I have the chrome ring is rusted. I could entertain getting it re-plated but if used/good ones are around that'd be the direct route.
>
> Any leads where I can find one? Thanks.
>
>
> Mark K5LXP
> Albuquerque, NM
>
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>
> Yahoo! Groups Links
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11735. Re: TR-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 15:37:32 UTC
From: qrper
Topic: 11710 Message: 11735

Naw.... I've had the old girl and have gotten use to stepping around her.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Rich Arland wrote:
>
>
> Hi Mikey:
>
> As usual, you keep me grounded!! Thanks, Pard.
>
> Hey, you wanna unload that TR-4CW? If so, lemme know and we'll do some business at FDIM/DAYTON.

11736. Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 15:51:55 UTC
From: qrper
Topic: 11731 Message: 11736

rich,

it's like this.

prices are dictated by the market. If you're willing to pay $450 for a ac4 then there is someone willing to sell you one for that price.

This works for radios, cars, and even Twinkies on ebay.

When I'm looking for something, the first thing I ask myself is how much would "I" sell it for? I think I could sell a AC4R rebuilt AC4 for $175.

That's what my market says they are worth.

Mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
>
>
> _k7sz@..._ (mailto:k7sz@...) writes:
>
> 2nd question: How much for an AC-4? I know that there is a speaker
> enclosure that can house the AC-4, need nomenclature and an apporximate cost.
> Rich Arland, K7SZ
> Several have responded that the speaker housing is an MS4. There are 4
> screw holes in the rear of the lower panel to hold the AC4. Do NOT ship as
> one unit, the MS4 cannot take the bouncing weight. Cost varies, based mainly
> on condition of the box.
>
> The AC-4 as a generality will be between $50 and $100 (+ maybe) Depends
> on whether it has a power supply rebuild kit installed. One such example
> would be a Heathkit AC4-R. These are rather simple to install and you can
> google for a look see.
> Good luck Carl wd8nhk
>
>
>
>
> [Non-text portions of this message have been removed]
>

11737. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 16:04:11 UTC
From: Paul Kraemer
Topic: 11731 Message: 11737

Well stated Mike
My mental calulator agrees and I use the same golden rule---don't ask more
than what I would reasonably pay for same condition
Used as is but working about $125
Recapped and gauranteed $175
FWIW
Paul K0UYA
----- Original Message -----
From: "qrper" <prosolar@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, February 05, 2013 9:51 AM
Subject: [DrakeRadio] Re: AC-4 Price??

> rich,
>
> it's like this.
>
> prices are dictated by the market. If you're willing to pay $450 for a ac4
> then there is someone willing to sell you one for that price.
>
> This works for radios, cars, and even Twinkies on ebay.
>
> When I'm looking for something, the first thing I ask myself is how much
> would "I" sell it for? I think I could sell a AC4R rebuilt AC4 for $175.
>
> That's what my market says they are worth.
>
>
> Mike, wb8vge
>
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>>
>>
>>
>> _k7sz@..._ (mailto:k7sz@...) writes:
>>
>> 2nd question: How much for an AC-4? I know that there is a speaker
>> enclosure that can house the AC-4, need nomenclature and an apporximate
>> cost.
>> Rich Arland, K7SZ
>> Several have responded that the speaker housing is an MS4. There are 4
>> screw holes in the rear of the lower panel to hold the AC4. Do NOT ship
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>> one unit, the MS4 cannot take the bouncing weight. Cost varies, based
>> mainly

>> on condition of the box.
>>
>> The AC-4 as a generality will be between $50 and $100 (+ maybe) Depends
>> on whether it has a power supply rebuild kit installed. One such
>> example
>> would be a Heathkit AC4-R. These are rather simple to install and you
>> can
>> google for a look see.
>> Good luck Carl wd8nhk
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>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11738. Re: [DrakeRadio] MN-1000 main tuning knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 16:48:54 UTC
From: Don Cunningham
Topic: 11727 Message: 11738

Jim,

Congratulations on your recent 4 line purchase!!! With some care, that should last you a good, long time. If you don't already know about them, I highly recommend the CD sets that Garey Barrell sells to help you find components and know possible faults to look for in your sets. Go to www.k4oah.com and see what is offered. These are NOT just copies of manuals and schematics, but true service manuals for the gear.

Ask a lot of questions of this group as you go, I do, and I always get some tips to help me in my repairs. I'm afraid I have nearly one of every major rig Drake made (not really, but the place looks like it, hi). Again, welcome, Jim!!
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11739. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 17:05:31 UTC
From: Steve Wedge
Topic: 11731 Message: 11739

And if you're selling on eBay, "Buy it Now" is your friend. I've sold a dual voltage AC-4 for a lot more than a regular one using BIN and it sold in 2 days.

Check hamfests, Craigslist, and local sales. You may be pleasantly surprised at the prices you find! You can still find plenty of TR-4's for well under $200.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 5, 2013, at 10:51 AM, "qrper" <prosolar@gmail.com> wrote:

> rich,
>
> it's like this.
>
> prices are dictated by the market. If you're willing to pay $450 for a ac4 then there is someone willing to sell you one for that price.
>
> This works for radios, cars, and even Twinkies on ebay.
>
> When I'm looking for something, the first thing I ask myself is how much would "I" sell it for? I think I could sell a AC4R rebuilt AC4 for $175.
>
> That's what my market says they are worth.
>
> Mike, wb8vge
>
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
> >
> >
> >
> > _k7sz@..._ (mailto:k7sz@...) writes:
> >
> > 2nd question: How much for an AC-4? I know that there is a speaker
> > enclosure that can house the AC-4, need nomenclature and an apporximate cost.
> > Rich Arland, K7SZ
> > Several have responded that the speaker housing is an MS4. There are 4
> > screw holes in the rear of the lower panel to hold the AC4. Do NOT ship as
> > one unit, the MS4 cannot take the bouncing weight. Cost varies, based mainly
> > on condition of the box.
> >
> > The AC-4 as a generality will be between $50 and $100 (+ maybe) Depends
> > on whether it has a power supply rebuild kit installed. One such example
> > would be a Heathkit AC4-R. These are rather simple to install and you can
> > google for a look see.
> > Good luck Carl wd8nhk

> >
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> > [Non-text portions of this message have been removed]
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11740. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 18:26:00 UTC
From: Kris Merschrod
Topic: 11731 Message: 11740

I agree with Rich, If not working but cables, transformer and case are in decent shape, then $75 or so. Remember shipping is brutal!

Kris KM2KM
----- Original Message -----
From: Paul Kraemer
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, February 05, 2013 11:04 AM
Subject: Re: [DrakeRadio] Re: AC-4 Price??

Well stated Mike
My mental calulator agrees and I use the same golden rule---don't ask more than what I would reasonably pay for same condition
Used as is but working about $125
Recapped and gauranteed $175
FWIW
Paul K0UYA
----- Original Message -----
From: "qrper" prosolar@...>
To: DrakeRadio@yahoogroups.com>
Sent: Tuesday, February 05, 2013 9:51 AM
Subject: [DrakeRadio] Re: AC-4 Price??

> rich,
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> it's like this.
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> prices are dictated by the market. If you're willing to pay $450 for a ac4
> then there is someone willing to sell you one for that price.
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> Yahoo! Groups Links
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11741. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 18:53:50 UTC
From: Steve Wedge
Topic: 11731 Message: 11741

I saw one AC-4 with an unopened heathkit shop kit sell on eBay recently for $185.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 5, 2013, at 1:26 PM, "Kris Merschrod" <kris@merschrod.net> wrote:

> I agree with Rich, If not working but cables, transformer and case are in decent shape, then $75 or so. Remember shipping is brutal!
>
> Kris KM2KM
> ----- Original Message -----
> From: Paul Kraemer
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 05, 2013 11:04 AM
> Subject: Re: [DrakeRadio] Re: AC-4 Price??
>
> Well stated Mike
> My mental calulator agrees and I use the same golden rule---don't ask more
> than what I would reasonably pay for same condition
> Used as is but working about $125
> Recapped and gauranteed $175
> FWIW
> Paul K0UYA
> ----- Original Message -----
> From: "qrper" prosolar@...>
> To: DrakeRadio@yahoogroups.com>
> Sent: Tuesday, February 05, 2013 9:51 AM
> Subject: [DrakeRadio] Re: AC-4 Price??
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> >
> > it's like this.
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> > Mike, wb8vge

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> > --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
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> >> Good luck Carl wd8nhk
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> > Yahoo! Groups Links
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11742. Re: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 19:44:02 UTC
From: DRogers
Topic: 11540 Message: 11742

There is nothing sadder than a dispirited Irishman.

David, WA7ZYQ
St Maries, ID

----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, February 05, 2013 4:54 AM
Subject: RE: [DrakeRadio] Drake 2B Red Noogie

JTSTRS (just to set the record straight), Patrick "Red" Noogie was an Irish ham who got the nickname "Red" for his flaming red hair color(when he had hair), and was famed for convening the "Noogie-net," which catered to rag-chewing Irish Whiskey distillers who were Drake fans (not the kind that cools finals). Ridiculed for his insistence that the Ether theory was responsible for radio propagation, he became dispirited and left Ham Radio in 1961 to become a UFO researcher. Last sighted in Roswell, NM selling bumper stickers with the famous slogan "I want to believe," he disappeared into the (well, you know...). In his memory, Drake fans (not the kind that cools finals) everywhere began calling the red Dial Adjustment Pins "Noogies."

And now, you know the rest of the story...

Terry K7WLD

Wenatchee, WA

.

[Non-text portions of this message have been removed]

11743. Re: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:09:04 UTC
From: Richard Knoppow
Topic: 11540 Message: 11743

>
>
> JTSTRS (just to set the record straight), Patrick "Red"
> Noogie was an Irish
> ham who got the nickname "Red" for his flaming red hair
> color(when he had
> hair), and was famed for convening the "Noogie-net,"
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> rag-chewing Irish Whiskey distillers who were Drake fans
> (not the kind that
> cools finals). Ridiculed for his insistence that the
> Ether theory was
> responsible for radio propagation, he became dispirited
> and left Ham Radio
> in 1961 to become a UFO researcher. Last sighted in
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> bumper stickers with the famous slogan "I want to
> believe," he disappeared
> into the (well, you know...). In his memory, Drake fans
> (not the kind that
> cools finals) everywhere began calling the red Dial
> Adjustment Pins
> "Noogies."
>
> And now, you know the rest of the story...
>
> Terry K7WLD
>
> Wenatchee, WA

Just to continue this totally off topic topic, Did You Know... That Gugleimo Marconi was half-Irish? His mother was Annie Jameson daughter of Andrew Jameson the founder of the Jameson Irish Whiskey distillery.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11744. Drake TR4 Transmit Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:14:02 UTC
From: tjb813
Topic: 11744 Message: 11744

I have a nice TR4, very clean, no mods that I can find. In SSB transmit with the gain set to 10 o'clock or higher, it will hang for 3-5 seconds after I let go of the mike key.

Anitvox - full up or zero - no change
Vox - set to zero - no change
Mike gain at zero while hanginging - no effect

It is not always consistent. SOmetimes it will work fine for an hour, then mess-up again.

I changed the Transmit AGC tube, checked voltages and resistor values.
I changed out the audio pre-amp tube.
I changed out the relay driver tube.

I have a sneaky feeling its a leaky cap in the VOX circuit.

Any idea what caps to test first?

It is a later model TR4, not C, CW, or CWRIT.

Thanks in advance for the help.

Tim KD8CN

11745. Re: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:25:38 UTC
From: Paul Pollock
Topic: 11540 Message: 11745

To WA7ZYQ,

Except a live Irishmen <wink>.

-Paul Pollock
KD7BWB

Sent from my iPhone

On Feb 5, 2013, at 12:44 PM, "DRogers" <wa7zyq@stmarieswireless.com> wrote:

> There is nothing sadder than a dispirited Irishman.
>
> David, WA7ZYQ
> St Maries, ID
>
> ----- Original Message -----
> From: Terrell Hamilton
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 05, 2013 4:54 AM
> Subject: RE: [DrakeRadio] Drake 2B Red Noogie
>
> JTSTRS (just to set the record straight), Patrick "Red" Noogie was an Irish
> ham who got the nickname "Red" for his flaming red hair color(when he had
> hair), and was famed for convening the "Noogie-net," which catered to
> rag-chewing Irish Whiskey distillers who were Drake fans (not the kind that
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> in 1961 to become a UFO researcher. Last sighted in Roswell, NM selling
> bumper stickers with the famous slogan "I want to believe," he disappeared
> into the (well, you know...). In his memory, Drake fans (not the kind that
> cools finals) everywhere began calling the red Dial Adjustment Pins
> "Noogies."
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> And now, you know the rest of the story...
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> Terry K7WLD
>
> Wenatchee, WA
>
> .
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> [Non-text portions of this message have been removed]
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11746. Re: [DrakeRadio] MN-1000 main tuning knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:27:34 UTC
From: Jim Larsen
Topic: 11727 Message: 11746

Thank you, Don. Yes, I have already purchased the CD set for the TR-4 series. I probably should go back and see what I am missing.

73, Jim

Jim Larsen, AL7FS
Anchorage Alaska
907-345-3190
http://www.AL7FS.us/

On 2/5/2013 7:48 AM, Don Cunningham wrote:
> the CD sets that Garey Barrell
>
> Don, WB5HAK

11747. Re: [DrakeRadio] Drake TR4 Transmit Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:31:44 UTC
From: Garey Barrell
Topic: 11744 Message: 11747

Tim -

Check value of R105. Measure voltage at junction of R105 and R108. Should be at least -5V when PTT
key-up. Open D6 / D10?

Not ALL NOS 6EV7 are 'gas-free'. If you have one, try another.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

tjb813 wrote:
> I have a nice TR4, very clean, no mods that I can find. In SSB transmit with the gain set to 10 o'clock or higher, it will hang for 3-5 seconds after I let go of the mike key.
>
> Anitvox - full up or zero - no change
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> I changed the Transmit AGC tube, checked voltages and resistor values.
> I changed out the audio pre-amp tube.
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> I have a sneaky feeling its a leaky cap in the VOX circuit.
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> Any idea what caps to test first?
>
> It is a later model TR4, not C, CW, or CWRIT.
>
> Thanks in advance for the help.
>
> Tim KD8CN
>
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> Yahoo! Groups Links
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11748. TR5

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:46:47 UTC
From: Woody
Topic: 3322 Message: 11748

Well here I am asking another TR5 question, my TR5 worked perfectly when I got it around a year ago then it started having problems on start up, when I turn it on it acts as though it is popping a circuit breaker, it comes up for an instant and then goes right back off, you can keep doing this and finally it will stay in and work flawlessly after it comes up. I use it on a PS7 and have another one on my 7 line so I've tried it on 2 different supplys and it does the same no matter which one its hooked up too. Any ideas
Thanks Again
Woody

--

* **Of **all **the things I've L**ost, I miss my Mind the Most~~~*

[Non-text portions of this message have been removed]

11749. Re: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 20:49:31 UTC
From: Dan Galligan
Topic: 11540 Message: 11749

Hey, I resemble that, or those, remarks! I think I'll have to tip a sip of Tullamore Dew, this evening, in honor of so many folks, being so astute, on Irish lore.

73,
Dan
W3RXO/W6

May the road rise to meet you, may the sun warm your face, may the wind fill your sails, may the Lord bless you with children, and may you be in heaven, a half hour, before the devil even knows you're dead.

Sent from my relatively bright, electronic leash.

On Feb 5, 2013, at 12:25, Paul Pollock <kd7bwb@...> wrote:

To WA7ZYQ,

Except a live Irishmen <wink>.

-Paul Pollock
KD7BWB

Sent from my iPhone

On Feb 5, 2013, at 12:44 PM, "DRogers" <wa7zyq@...> wrote:

> There is nothing sadder than a dispirited Irishman.
>
> David, WA7ZYQ
> St Maries, ID
>
> ----- Original Message -----
> From: Terrell Hamilton
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 05, 2013 4:54 AM
> Subject: RE: [DrakeRadio] Drake 2B Red Noogie
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> JTSTRS (just to set the record straight), Patrick "Red" Noogie was an Irish
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> cools finals) everywhere began calling the red Dial Adjustment Pins

> "Noogies."
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> And now, you know the rest of the story...
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> Terry K7WLD
>
> Wenatchee, WA
>
> .
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> [Non-text portions of this message have been removed]

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Yahoo! Groups Links

11750. Removing PTO cover???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 21:11:17 UTC
From: K4GM-George
Topic: 11750 Message: 11750

Is there a trick to removing the PTO cover? I disconnected the tension spring and attempted to squeeze the two clips but I don't feel any loosening of the cover. I don't want to force anything so have used only TLC so far but tonight I will try needle nosed pliers to squeeze top and bottom prongs simultaneously. Am I on the right track???

George K4GM

11751. Re: [DrakeRadio] Removing PTO cover???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 21:22:46 UTC
From: Garey Barrell
Topic: 11750 Message: 11751

George -

Yes, they work just like the old IF cans. You can squeeze them together (_not too much_) enough to
clear ONE 'hook' then hold while you clear the other hook. It can help to put folded paper between
the bottom edge of the can and the back of the gearbox to keep one from slipping back in while
you're working on the other. Once one side is clear, do the other. I have a tiny (4") pair of angle
slip jaw pliers that makes it easier to controlthe pressure, AND limits the amount of compression.
They WILL break if pushed too far, but I've never broken one and I've pushed them pretty far!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

K4GM-George wrote:
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>
> George K4GM
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> Yahoo! Groups Links
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11752. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 21:31:50 UTC
From: Mike
Topic: 11731 Message: 11752

Be careful about "not working"

Could be a toasted transformer. Rare, but I've seen them.

Mike wb8vge

Sent from my iPhone

On Feb 5, 2013, at 1:26 PM, "Kris Merschrod" <kris@...> wrote:

> I agree with Rich, If not working but cables, transformer and case are in decent shape, then $75 or so. Remember shipping is brutal!
>
> Kris KM2KM
> ----- Original Message -----
> From: Paul Kraemer
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 05, 2013 11:04 AM
> Subject: Re: [DrakeRadio] Re: AC-4 Price??
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> Well stated Mike
> My mental calulator agrees and I use the same golden rule---don't ask more
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> Used as is but working about $125
> Recapped and gauranteed $175
> FWIW
> Paul K0UYA
> ----- Original Message -----
> From: "qrper" prosolar@...>
> To: DrakeRadio@yahoogroups.com>
> Sent: Tuesday, February 05, 2013 9:51 AM
> Subject: [DrakeRadio] Re: AC-4 Price??
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> > Mike, wb8vge
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[Non-text portions of this message have been removed]

11753. Re: [DrakeRadio] TR5 Schematic

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 22:12:41 UTC
From: Chgypsy@...
Topic: 11753 Message: 11753

Hello to the group,

Anyone out there have a digitized Drake TR5 schematic?
I have the paper one, but real tired of moving my magnifying glass around.
I would have sworn I had one, but cannot find it. Carl WD8NHK

[Non-text portions of this message have been removed]

11754. Re: Drake TR4 Transmit Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 22:18:19 UTC
From: Fred or Ski
Topic: 11744 Message: 11754

I had a similar experience with my T4XC used with a D104 Silver Eagle mike. I suspect it would be very close to the TR4. I had the mike amp in the mike 'turned up' from a previous radio and it caused the PTT to hang up. After I turned the mike down to a normal level, all op ok. I was operating it in PTT(not VOX) when this problem happened. If you have an amplified mike try turning it down.

Good luck and 73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

11755. Re: [DrakeRadio] TR5 stuff

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 22:20:23 UTC
From: Chgypsy@...
Topic: 11755 Message: 11755

_ko4bg1@..._ (mailto:ko4bg1@...) writes:

my TR5 worked perfectly around a year ago then it started having problems on start up, when
I turn it on it acts as though it is popping a circuit breaker, it comes up for an instant and then goes right back off, you can keep doing this and finally it will stay in and work flawlessly after it comes up. I use it on a PS7 and have another one on my 7 line so I've tried it on 2 different supplys and it does the same no matter which one its hooked up too. Any ideas Woody
Hi Woody, Never had that one. Have had a lack of use on my TR5 it would not turn on, and it was a capacitor charging up after perhaps a year or so of non use, took multiple on offs.....always felt it was my power supply which is in my case the original PS 75. Carl wd8nhk

[Non-text portions of this message have been removed]

11756. RE: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 23:07:25 UTC
From: Terrell Hamilton
Topic: 11540 Message: 11756

Richard - Off topic topics seem to be very topical right now.

Andrew must be the guy on the TV commercial who goes after the barrel of Jameson when it gets washed overboard and comes up to his own funeral on the beach. Imagine! Supplying the whiskey for your own wake... weird, eh?

Terry K7WLD

Wenatchee, WA

>Just to continue this totally off topic topic, Did You
>Know... That Gugleimo Marconi was half-Irish? His mother
>was Annie Jameson daughter of Andrew Jameson the founder of
>the Jameson Irish Whiskey distillery.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

11757. RE: [DrakeRadio] Drake 2B Red Noogie

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 23:11:22 UTC
From: Terrell Hamilton
Topic: 11540 Message: 11757

Ah, Danny, me boyo, we shud all join ya', toast our Drakes, and BBQ our ducks!

Terry

K7WLD

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Tuesday, February 05, 2013 12:50 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake 2B Red Noogie

Hey, I resemble that, or those, remarks! I think I'll have to tip a sip of Tullamore Dew, this evening, in honor of so many folks, being so astute, on Irish lore.

73,
Dan
W3RXO/W6

May the road rise to meet you, may the sun warm your face, may the wind fill your sails, may the Lord bless you with children, and may you be in heaven, a half hour, before the devil even knows you're dead.

Sent from my relatively bright, electronic leash.

On Feb 5, 2013, at 12:25, Paul Pollock kd7bwb@...
<mailto:kd7bwb%40gmail.com> > wrote:

To WA7ZYQ,

Except a live Irishmen .

-Paul Pollock
KD7BWB

Sent from my iPhone

On Feb 5, 2013, at 12:44 PM, "DRogers" wa7zyq@...
<mailto:wa7zyq%40stmarieswireless.com> > wrote:

> There is nothing sadder than a dispirited Irishman.
>
> David, WA7ZYQ
> St Maries, ID
>
> ----- Original Message -----

> From: Terrell Hamilton
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Tuesday, February 05, 2013 4:54 AM
> Subject: RE: [DrakeRadio] Drake 2B Red Noogie
>
> JTSTRS (just to set the record straight), Patrick "Red" Noogie was an
Irish
> ham who got the nickname "Red" for his flaming red hair color(when he had
> hair), and was famed for convening the "Noogie-net," which catered to
> rag-chewing Irish Whiskey distillers who were Drake fans (not the kind
that
> cools finals). Ridiculed for his insistence that the Ether theory was
> responsible for radio propagation, he became dispirited and left Ham Radio
> in 1961 to become a UFO researcher. Last sighted in Roswell, NM selling
> bumper stickers with the famous slogan "I want to believe," he disappeared
> into the (well, you know...). In his memory, Drake fans (not the kind that
> cools finals) everywhere began calling the red Dial Adjustment Pins
> "Noogies."
>
> And now, you know the rest of the story...
>
> Terry K7WLD
>
> Wenatchee, WA
>
> .
>
> [Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11758. RE: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 23:15:41 UTC
From: Terrell Hamilton
Topic: 11731 Message: 11758

Talk about price! How can transformers cost so much ? (gasp) If it's a toasted xformer, might as well buy another AC-4, and use that one for parts

Terry K7WLD

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Mike
Sent: Tuesday, February 05, 2013 1:32 PM
To: DrakeRadio@yahoogroups.com
Cc: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] Re: AC-4 Price??

Be careful about "not working"

Could be a toasted transformer. Rare, but I've seen them.

Mike wb8vge

Sent from my iPhone

On Feb 5, 2013, at 1:26 PM, "Kris Merschrod" kris@... <mailto:kris%40merschrod.net> > wrote:

> I agree with Rich, If not working but cables, transformer and case are in decent shape, then $75 or so. Remember shipping is brutal!
>
> Kris KM2KM
> ----- Original Message -----
> From: Paul Kraemer
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Tuesday, February 05, 2013 11:04 AM
> Subject: Re: [DrakeRadio] Re: AC-4 Price??
>
> Well stated Mike
> My mental calulator agrees and I use the same golden rule---don't ask more

> than what I would reasonably pay for same condition
> Used as is but working about $125
> Recapped and gauranteed $175
> FWIW
> Paul K0UYA
> ----- Original Message -----
> From: "qrper" prosolar@... <mailto:prosolar%40gmail.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
> Sent: Tuesday, February 05, 2013 9:51 AM
> Subject: [DrakeRadio] Re: AC-4 Price??
>

> > rich,
> >
> > it's like this.
> >
> > prices are dictated by the market. If you're willing to pay $450 for a
ac4
> > then there is someone willing to sell you one for that price.
> >
> > This works for radios, cars, and even Twinkies on ebay.
> >
> > When I'm looking for something, the first thing I ask myself is how much

> > would "I" sell it for? I think I could sell a AC4R rebuilt AC4 for $175.
> >
> > That's what my market says they are worth.
> >
> >
> > Mike, wb8vge
> >
> >
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11759. Re: [DrakeRadio] Re: AC-4 Price??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-05 23:51:16 UTC
From: Mike
Topic: 11731 Message: 11759

Last time I inquired to rewind an ac4 transformer, it was kicking close to $200.

Ouch!

Mike wb8vge

Sent from my iPhone

On Feb 5, 2013, at 6:15 PM, "Terrell Hamilton" <hamilter@...> wrote:

> Talk about price! How can transformers cost so much ? (gasp) If it's a
> toasted xformer, might as well buy another AC-4, and use that one for parts
>
> Terry K7WLD
> _

[Non-text portions of this message have been removed]

11760. Re: [DrakeRadio] TR5 Schematic

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 01:46:48 UTC
From: Tom Evans, AG9X
Topic: 11753 Message: 11760

Carl,

I've got two that were scanned by Kinko's. I've been wanting to re-do them
at higher resolution but haven't done that yet.

I'll put them in my Dropbox account and share them with you.

Tom, AG9X

On Tue, Feb 5, 2013 at 4:12 PM, <Chgypsy@...> wrote:

> **
>
>
> Hello to the group,
>
> Anyone out there have a digitized Drake TR5 schematic?
> I have the paper one, but real tired of moving my magnifying glass around.
> I would have sworn I had one, but cannot find it. Carl WD8NHK
>
>

[Non-text portions of this message have been removed]

11761. Re: 2B Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 01:57:41 UTC
From: Tom Evans, AG9X
Topic: 11727 Message: 11761

Mark,

Maybe you've done this already, but you might try some very fine steel wool on the rust and see how it does. Years ago I cleaned up a rusty chrome bicycle for my son that way and was amazed how well it worked.

Tom, AG9X

From: Mark Brueggemann <qrq_cw@...>
Date: Mon, Feb 4, 2013 at 10:22 PM
Subject: [DrakeRadio] 2B Tuning Knob
To: DrakeRadio@yahoogroups.com

Been casually looking around for a tuning knob for a 2B for a while and nothing's turned up. The one I have the chrome ring is rusted. I could entertain getting it re-plated but if used/good ones are around that'd be the direct route.

Any leads where I can find one? Thanks.

Mark K5LXP
Albuquerque, NM

11762. Re: TR5 Schematic

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 02:23:08 UTC
From: ko4bg
Topic: 11753 Message: 11762

Tom, could I bum a copy of the TR5 Schematic? I sure could use one right now
Woody
--- In DrakeRadio@yahoogroups.com, "Tom Evans, AG9X" wrote:
>
> Carl,
>
> I've got two that were scanned by Kinko's. I've been wanting to re-do them
> at higher resolution but haven't done that yet.
>
> I'll put them in my Dropbox account and share them with you.
>
> Tom, AG9X
>
>
>
> On Tue, Feb 5, 2013 at 4:12 PM, wrote:
>
> > **
> >
> >
> > Hello to the group,
> >
> > Anyone out there have a digitized Drake TR5 schematic?
> > I have the paper one, but real tired of moving my magnifying glass around.
> > I would have sworn I had one, but cannot find it. Carl WD8NHK
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

11763. Re: [DrakeRadio] Re: TR5 Schematic

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 02:37:41 UTC
From: Tom Evans, AG9X
Topic: 11753 Message: 11763

Sure enough. It's on the way.

-Tom

On Tue, Feb 5, 2013 at 8:23 PM, ko4bg <ko4bg1@...> wrote:

> **
>
>
>
> Tom, could I bum a copy of the TR5 Schematic? I sure could use one right
> now
> Woody
>
> --- In DrakeRadio@yahoogroups.com, "Tom Evans, AG9X" wrote:
> >
> > Carl,
> >
> > I've got two that were scanned by Kinko's. I've been wanting to re-do
> them
> > at higher resolution but haven't done that yet.
> >
> > I'll put them in my Dropbox account and share them with you.
> >
> > Tom, AG9X
> >
>
>

[Non-text portions of this message have been removed]

11764. Re: Drake TR4 Transmit Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 15:26:05 UTC
From: tjb813
Topic: 11744 Message: 11764

I am not using an amplified mike. Will check R105 and 6EV7. Thanks Garey

--- In DrakeRadio@yahoogroups.com, Fred or Ski wrote:
>
> I had a similar experience with my T4XC used with a D104 Silver Eagle mike. I suspect it would be very close to the TR4. I had the mike amp in the mike 'turned up' from a previous radio and it caused the PTT to hang up. After I turned the mike down to a normal level, all op ok. I was operating it in PTT(not VOX) when this problem happened. If you have an amplified mike try turning it down.
>
> Good luck and 73,
>
> Ski-WB8YXI
>
> [Non-text portions of this message have been removed]
>

11765. Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 19:02:50 UTC
From: Tom
Topic: 8812 Message: 11765

Garey...Sorry this has taken so long. When first tuned the output is stable for 10-15 minutes then starts down very slowly. I keep checking every couple of minutes so I think the problem is related to something heating up and changing value. I've been told there is a resistor in the PS section that supplies the voltage to unbalance the modulator to produce the carrier that goes through one section of the control pot. Not sure which one it is. Thanks....Tom

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Tom -
>
> How long does it take to drift back down??
>
> 73, Garey - K4OAH
> Glen Allen, VA
> Drake Service Supplement CDs for
> 2-B, 2-C/NT, A, B and C-Line,
> TR-4 and TR-4C
>
> >>> From: "Tom"
> >>> To:
> >>> Sent: Wednesday, August 01, 2012 11:52 AM
> >>> Subject: [DrakeRadio] Re: T4XB Low Output
> >>>
> >>>
> >>> Thanks very much for the replies. I cleaned the function
> >>> switch contacts the best I could and got the output up to
> >>> 120 watts. The next time I put it in tune, the output was
> >>> low again. Rock the switch and it comes back. Either I
> >>> have to clean it better or the contacts are shot. I think
> >>> I can probably work it out with a couple more cleanings.
> >>> I'm using regular contact cleaner. I should get some
> >>> DeOxit. I have never used it but seems to be the experts
> >>> choice. Thanks again...Tom
> >>>
>

11766. Re: [DrakeRadio] Re: T4XB Low Output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 19:39:35 UTC
From: Garey Barrell
Topic: 8812 Message: 11766

Tom -

More likely that the finals are gassy. When the output is dropping, is the PLATE current dropping
as well? After it's been running a while, and the output has dropped, check the idle current quickly.

Also check the value and condition of R26. Check R32, R33,these two should be within 5% of eachother.

R79 is the control for the unbalance of the BM. This is only used in CW to allow the CO to pass
through the BM. In TUNE mode, R84 controls the level of audio tone applied to the BM, which generates a single frequency SSB signal (appears as a CW signal) for adjusting the amount of drive.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Tom wrote:
> Garey...Sorry this has taken so long. When first tuned the output is stable for 10-15 minutes then starts down very slowly. I keep checking every couple of minutes so I think the problem is related to something heating up and changing value. I've been told there is a resistor in the PS section that supplies the voltage to unbalance the modulator to produce the carrier that goes through one section of the control pot. Not sure which one it is. Thanks....Tom
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>> Tom -
>>
>> How long does it take to drift back down??
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>> Drake Service Supplement CDs for
>> 2-B, 2-C/NT, A, B and C-Line,
>> TR-4 and TR-4C
>>
>>>>> From: "Tom"
>>>>> To:
>>>>> Sent: Wednesday, August 01, 2012 11:52 AM
>>>>> Subject: [DrakeRadio] Re: T4XB Low Output

>>>>>
>>>>>
>>>>>> Thanks very much for the replies. I cleaned the function
>>>>>> switch contacts the best I could and got the output up to
>>>>>> 120 watts. The next time I put it in tune, the output was
>>>>>> low again. Rock the switch and it comes back. Either I
>>>>>> have to clean it better or the contacts are shot. I think
>>>>>> I can probably work it out with a couple more cleanings.
>>>>>> I'm using regular contact cleaner. I should get some
>>>>>> DeOxit. I have never used it but seems to be the experts
>>>>>> choice. Thanks again...Tom
>>>>>>
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>
> Yahoo! Groups Links
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11767. Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 19:59:01 UTC
From: Dan Galligan
Topic: 11767 Message: 11767

The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo at mac dot com

"A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow

[Non-text portions of this message have been removed]

11768. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 20:08:21 UTC
From: vacuuminded2@...
Topic: 11767 Message: 11768

They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay selling lots of 50 for like $5.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 1:59 PM, Dan Galligan <w3rxo@...> wrote:

> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>
> Dan Galligan
> W3RXO/W6
> Pomona, CA
> DM14cb
> w3rxo at mac dot com
>
> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11769. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 20:24:11 UTC
From: Dan Galligan
Topic: 11767 Message: 11769

I simply prefer the philips head, because they get buggered up, less than straight blade. If I have to buy some, I might as well get the ones that are easier to work with, and less likely to get buggered. This TR-4, only had 6 screws, total, holding it together.

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo at mac dot com

"If you put the federal government in charge of the Sahara Desert, in five years there'd be a shortage of sand."
Milton Friedman

On Feb 6, 2013, at 12:08 PM, vacuuminded2@... wrote:

They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay selling lots of 50 for like $5.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 1:59 PM, Dan Galligan <w3rxo@...> wrote:

> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>
> Dan Galligan
> W3RXO/W6
> Pomona, CA
> DM14cb
> w3rxo at mac dot com
>
> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

Yahoo! Groups Links

11770. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 20:27:00 UTC
From: vacuuminded2@...
Topic: 11767 Message: 11770

I have black oxide, Phillips pan heads here in 6-32x1/4. Send me your address and I'll stick a dozen in an envelope for ya.

Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 2:24 PM, Dan Galligan <w3rxo@...> wrote:

> I simply prefer the philips head, because they get buggered up, less than straight blade. If I have to buy some, I might as well get the ones that are easier to work with, and less likely to get buggered. This TR-4, only had 6 screws, total, holding it together.
>
> Dan Galligan
> W3RXO/W6
> Pomona, CA
> DM14cb
> w3rxo at mac dot com
>
> "If you put the federal government in charge of the Sahara Desert, in five years there’d be a shortage of sand.”
> Milton Friedman
>
> On Feb 6, 2013, at 12:08 PM, vacuuminded2@... wrote:
>
> They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay selling lots of 50 for like $5.
>
> Regards,
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On Feb 6, 2013, at 1:59 PM, Dan Galligan <w3rxo@...> wrote:
>
>> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>>
>> Dan Galligan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>> w3rxo at mac dot com
>>

>> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
>>
>> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11771. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:05:46 UTC
From: Kris Merschrod
Topic: 11767 Message: 11771

Oh, No!

Dan, those out of class and out of era Philips screws will degade the whole rig! :>)

Confession, I have some not even painted ones on one of my rigs - but one day I will buy a bag of 50 "authentic" ones with black powder finish.

Size 8-32

Kris KM2KM
----- Original Message -----
From: Dan Galligan
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 2:59 PM
Subject: [DrakeRadio] Case Screw sizes

The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo at mac dot com

"A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11772. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:10:28 UTC
From: Don Cunningham
Topic: 11767 Message: 11772

Kris,

Those screws are 6/32, not 8/32. Lots of difference, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11773. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:23:52 UTC
From: Garey Barrell
Topic: 11767 Message: 11773

Kris-

I just don't understand how someone could be so crude as to use Philips screws on a piece of Drake
gear. If we're lucky, it'll just spit 'em back out! :-)

Just wait until he sees what he's done to the re-sale value, as if anyone 'would' resell aDrake.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Kris Merschrod wrote:
> Oh, No!
>
> Dan, those out of class and out of era Philips screws will degade the whole rig! :>)
>
> Confession, I have some not even painted ones on one of my rigs - but one day I will buy a bag of 50 "authentic" ones with black powder finish.
>
> Size 8-32
>
> Kris KM2KM
> ----- Original Message -----
> From: Dan Galligan
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, February 06, 2013 2:59 PM
> Subject: [DrakeRadio] Case Screw sizes
>
>
>
> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>
> Dan Galligan
> W3RXO/W6
>

11774. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:25:31 UTC
From: vacuuminded2@...
Topic: 11767 Message: 11774

Just call it the newest, hottest Sherwood "upgrade" and post the rig on eBay with a BIN of $1295.00

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 3:23 PM, Garey Barrell <k4oah@...> wrote:

> Kris-
>
> I just don't understand how someone could be so crude as to use Philips screws on a piece of Drake
> gear. If we're lucky, it'll just spit 'em back out! :-)
>
> Just wait until he sees what he's done to the re-sale value, as if anyone 'would' resell aDrake.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Kris Merschrod wrote:
> > Oh, No!
> >
> > Dan, those out of class and out of era Philips screws will degade the whole rig! :>)
> >
> > Confession, I have some not even painted ones on one of my rigs - but one day I will buy a bag of 50 "authentic" ones with black powder finish.
> >
> > Size 8-32
> >
> > Kris KM2KM
> > ----- Original Message -----
> > From: Dan Galligan
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, February 06, 2013 2:59 PM
> > Subject: [DrakeRadio] Case Screw sizes
> >
> >
> >
> > The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
> >

> > Dan Galligan
> > W3RXO/W6
> >
>
>

[Non-text portions of this message have been removed]

11775. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:33:43 UTC
From: Dan Galligan
Topic: 11767 Message: 11775

You guys crack me up. Actually, since this is just going to be a play-toy, not a restoration, and the radio has some other cosmetic issues, I'm not too concerned about having the "wrong screws", as long as they are the right size.
Thanks to Chris, I will have a matching set of the correct sized screws, albeit "dastardly" Philips head, type. I'll have to go see the parish priest, and take confession, and ask for forgiveness, for that sin.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 1:23 PM, Garey Barrell <k4oah@...> wrote:

> Kris-
>
> I just don't understand how someone could be so crude as to use Philips screws on a piece of Drake
> gear. If we're lucky, it'll just spit 'em back out! :-)
>
> Just wait until he sees what he's done to the re-sale value, as if anyone 'would' resell aDrake.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Kris Merschrod wrote:
>> Oh, No!
>>
>> Dan, those out of class and out of era Philips screws will degade the whole rig! :>)
>>
>> Confession, I have some not even painted ones on one of my rigs - but one day I will buy a bag of 50 "authentic" ones with black powder finish.
>>
>> Size 8-32
>>
>> Kris KM2KM
>> ----- Original Message -----
>> From: Dan Galligan
>> To: DrakeRadio@yahoogroups.com

>> Sent: Wednesday, February 06, 2013 2:59 PM
>> Subject: [DrakeRadio] Case Screw sizes
>>
>>
>>
>> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>>
>> Dan Galligan
>> W3RXO/W6
>
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11776. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 21:46:23 UTC
From: Barry
Topic: 11767 Message: 11776

At least you're not having to source undercut 100-deg. flat-head Pozidrive 6-32's for HP gear. _Those_ are hard to find.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, February 6, 2013 3:33:43 PM
> Subject: Re: [DrakeRadio] Case Screw sizes
>
> You guys crack me up. Actually, since this is just going to be a
> play-toy, not a restoration, and the radio has some other cosmetic
> issues, I'm not too concerned about having the "wrong screws", as
> long as they are the right size.
> Thanks to Chris, I will have a matching set of the correct sized
> screws, albeit "dastardly" Philips head, type. I'll have to go see
> the parish priest, and take confession, and ask for forgiveness, for
> that sin.
>
> Dan
>
> That government is best, which governs the least, because its people
> discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 6, 2013, at 1:23 PM, Garey Barrell <k4oah@...>
> wrote:
>
> > Kris-
> >
> > I just don't understand how someone could be so crude as to use
> > Philips screws on a piece of Drake
> > gear. If we're lucky, it'll just spit 'em back out! :-)
> >
> > Just wait until he sees what he's done to the re-sale value, as if
> > anyone 'would' resell aDrake.........
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs

> > <www.k4oah.com>
> >
> > Kris Merschrod wrote:
> >> Oh, No!
> >>
> >> Dan, those out of class and out of era Philips screws will degade
> >> the whole rig! :>)
> >>
> >> Confession, I have some not even painted ones on one of my rigs -
> >> but one day I will buy a bag of 50 "authentic" ones with black
> >> powder finish.
> >>
> >> Size 8-32
> >>
> >> Kris KM2KM
> >> ----- Original Message -----
> >> From: Dan Galligan
> >> To: DrakeRadio@yahoogroups.com
> >> Sent: Wednesday, February 06, 2013 2:59 PM
> >> Subject: [DrakeRadio] Case Screw sizes
> >>
> >>
> >>
> >> The TR-4 that I just purchased, is in need of a few case screws,
> >> so I thought I would buy all new ones, in a philips, pan head,
> >> rather than the original flat head. What is the size and thread
> >> pitch?
> >>
> >> Dan Galligan
> >> W3RXO/W6
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11777. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 22:08:31 UTC
From: Kris Merschrod
Topic: 11767 Message: 11777

Thank you Don,

I just put a gauge on the threads and then took out a die and it seemed tothread in comfortably.

Gary I promise to buy some regulation ones on eBay :>)

Kris KM2KM
----- Original Message -----
From: Don Cunningham
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 4:10 PM
Subject: Re: [DrakeRadio] Case Screw sizes

Kris,

Those screws are 6/32, not 8/32. Lots of difference, hi.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11778. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 22:31:44 UTC
From: Robert Logan
Topic: 11767 Message: 11778

Chris, saw your email about the screws for the Drake

My T4XC and R4 have mismatched screws including (ugh) shiny Phillips heads. I would like to take up your offer to the other fellow but would be glad to pay you for them. Can you do that?

If so, my mailing address is
Bob Logan, NZ5A
8712 Lone Tree Dr.
Manor, TX 78653.

Let me know your price and address and I'll send it right off.

I would appreciate it very much. I am proud of my Drakes. Thank you.

Bob

Sent from my iPhone

On Feb 6, 2013, at 2:27 PM, vacuuminded2@... wrote:

I have black oxide, Phillips pan heads here in 6-32x1/4. Send me your address and I'll stick a dozen in an envelope for ya.

Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 2:24 PM, Dan Galligan w3rxo@...> wrote:

> I simply prefer the philips head, because they get buggered up, less than straight blade. If I have to buy some, I might as well get the ones that are easier to work with, and less likely to get buggered. This TR-4, only had 6 screws, total, holding it together.
>
> Dan Galligan
> W3RXO/W6
> Pomona, CA
> DM14cb
> w3rxo at mac dot com
>
> "If you put the federal government in charge of the Sahara Desert, in five years there’d be a shortage of sand.”
> Milton Friedman
>
> On Feb 6, 2013, at 12:08 PM, vacuuminded2@... wrote:
>
> They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay

selling lots of 50 for like $5.
>
> Regards,
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On Feb 6, 2013, at 1:59 PM, Dan Galligan w3rxo@...> wrote:
>
>> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>>
>> Dan Galligan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>> w3rxo at mac dot com
>>
>> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
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11779. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 22:41:27 UTC
From: vacuuminded2@...
Topic: 11767 Message: 11779

Bob,
The ones I have here at work are Phillips head, whereas the originals were slotted. Dan actually wanted Phillips head instead, thus my offer. I do not have any slotted ones, although I may buy a box from the fellow on eBay or McMaster Carr sometime for my Drakes.

If you don't care and still want the Phillips ones I have, send me a note off-list.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 4:31 PM, Robert Logan <bob.logan47@...> wrote:

> Chris, saw your email about the screws for the Drake
>
> My T4XC and R4 have mismatched screws including (ugh) shiny Phillips heads. I would like to take up your offer to the other fellow but would be glad to pay you for them. Can you do that?
>
> If so, my mailing address is
> Bob Logan, NZ5A
> 8712 Lone Tree Dr.
> Manor, TX 78653.
>
> Let me know your price and address and I'll send it right off.
>
> I would appreciate it very much. I am proud of my Drakes. Thank you.
>
> Bob
>
> Sent from my iPhone
>
> On Feb 6, 2013, at 2:27 PM, vacuuminded2@... wrote:
>
> I have black oxide, Phillips pan heads here in 6-32x1/4. Send me your address and I'll stick a dozen in an envelope for ya.
>
> Chris
>
> Sent from my outdated iPhone wireless thingy
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> On Feb 6, 2013, at 2:24 PM, Dan Galligan w3rxo@...> wrote:
>
> > I simply prefer the philips head, because they get buggered up, less than straight blade. If I have to buy some, I might as well get the ones that are easier to work with,

and less likely to get buggered. This TR-4, only had 6 screws, total, holding it together.
> >
> > Dan Galligan
> > W3RXO/W6
> > Pomona, CA
> > DM14cb
> > w3rxo at mac dot com
> >
> > "If you put the federal government in charge of the Sahara Desert, in five years there'd be a shortage of sand."
> > Milton Friedman
> >
> > On Feb 6, 2013, at 12:08 PM, vacuuminded2@... wrote:
> >
> > They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay selling lots of 50 for like $5.
> >
> > Regards,
> > Chris
> >
> > Sent from my outdated iPhone wireless thingy
> >
> > On Feb 6, 2013, at 1:59 PM, Dan Galligan w3rxo@...> wrote:
> >
> >> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
> >>
> >> Dan Galligan
> >> W3RXO/W6
> >> Pomona, CA
> >> DM14cb
> >> w3rxo at mac dot com
> >>
> >> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
> >>
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11780. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 22:52:33 UTC
From: Kris Merschrod
Topic: 11767 Message: 11780

God sense of humor Dan,

I like the TJ Quotation - this net is the people's discipline :>)

Kris
----- Original Message -----
From: Dan Galligan
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 4:33 PM
Subject: Re: [DrakeRadio] Case Screw sizes

You guys crack me up. Actually, since this is just going to be a play-toy, not a restoration, and the radio has some other cosmetic issues, I'm not too concerned about having the "wrong screws", as long as they are the right size.
Thanks to Chris, I will have a matching set of the correct sized screws, albeit "dastardly" Philips head, type. I'll have to go see the parish priest, and take confession, and ask for forgiveness, for that sin.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 1:23 PM, Garey Barrell k4oah@...> wrote:

> Kris-
>
> I just don't understand how someone could be so crude as to use Philips screws on a piece of Drake
> gear. If we're lucky, it'll just spit 'em back out! :-)
>
> Just wait until he sees what he's done to the re-sale value, as if anyone 'would' resell aDrake.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Kris Merschrod wrote:
>> Oh, No!
>>
>> Dan, those out of class and out of era Philips screws will degade the whole rig! :>)

>>
>> Confession, I have some not even painted ones on one of my rigs - but one day I will buy a bag of 50 "authentic" ones with black powder finish.
>>
>> Size 8-32
>>
>> Kris KM2KM
>> ----- Original Message -----
>> From: Dan Galligan
>> To: DrakeRadio@yahoogroups.com
>> Sent: Wednesday, February 06, 2013 2:59 PM
>> Subject: [DrakeRadio] Case Screw sizes
>>
>>
>>
>> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
>>
>> Dan Galligan
>> W3RXO/W6
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11781. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-06 23:52:30 UTC
From: Steve Wedge
Topic: 11767 Message: 11781

Dan, do you mean the screws that hold the covers on? Those are panhead and not flathead.

If that's what you're looking for, they're 6-32 and 3/8" long, IIRC. There's a vendor on eBay who sells them 50/$5. I'm already on my second bag of 'em

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Wednesday, February 06, 2013 2:59 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Case Screw sizes

The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo at mac dot com

"A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow

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11782. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 01:15:10 UTC
From: Kris Merschrod
Topic: 11767 Message: 11782

Beware, those extra screws attract more rigs. Steve is proof of that - on his second bag. You just have to use them up on Drake cases. Henced the NEED for more rigs!

Kris KM2KM
----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 6:52 PM
Subject: Re: [DrakeRadio] Case Screw sizes

Dan, do you mean the screws that hold the covers on? Those are panhead and not flathead.

If that's what you're looking for, they're 6-32 and 3/8" long, IIRC. There's a vendor on eBay who sells them 50/$5. I'm already on my second bag of 'em

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Wednesday, February 06, 2013 2:59 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Case Screw sizes

The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
w3rxo at mac dot com

"A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow

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11783. New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:15:13 UTC
From: Dan Galligan
Topic: 11783 Message: 11783

Am in process of installing AC-4R kit, in AC-4, S/N 29288. The ends of the bolts, where the AC-4R standoffs are to mount, on the transformers, are on the opposite side, of the transformer, from the three capacitors I just removed. And, the underside is quite different from the photos in the kit.
It's been about 6 years, since I did one of these kits. Would I be better off, just removing the other two caps, from the side where the nuts thread onto the screws, and mount the PCB there? It looks like less room, and maybe will not fit. Or, should I un-install the transformer, and reverse it's position? Or, will the screws through the transformer body itself come out, so I can just reverse them?
Thanks for the input. I thought this was going to be a simple hour long job, like the last one. I guess not. Whatever I do, it's going to be long and arduous, me thinks.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

11784. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:23:42 UTC
From: Don Cunningham
Topic: 11783 Message: 11784

Dan,

I had to reverse the screws (bolts) on the transformer to put the one in that I did as well. It was a later serial number as yours is, so not sure if that makes a difference or not. I noticed no humm or vibrations with the transformer after that, so no ill effects to doing that unless someone knows more than I do about the transformers (entirely likely).
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11785. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:24:41 UTC
From: William Houghton
Topic: 11783 Message: 11785

Dan,

I had the same problem on one of the AC-4's I did. Loosen the nuts enough that they cover the ends of the threads. Then tap the nuts lightly so that the screw heads will break through the paint or varnish coating and start coming out. The reason for covering the threads with the nuts is to avoid damaging the threads with your hamer, etc. Remove the screw. Then you can reverse the screw position on the xfmr. Do one screw & nut at a time and everything will stay aligned.

73 & good luck - Bill

From: Dan Galligan <w3rxo@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Wed, February 6, 2013 6:15:26 PM
Subject: [DrakeRadio] New question....

Am in process of installing AC-4R kit, in AC-4, S/N 29288. The ends of the bolts, where the AC-4R standoffs are to mount, on the transformers, are on the opposite side, of the transformer, from the three capacitors I just removed. And, the underside is quite different from the photos in the kit.

It's been about 6 years, since I did one of these kits. Would I be better off, just removing the other two caps, from the side where the nuts thread onto the screws, and mount the PCB there? It looks like less room, and maybe will not fit. Or, should I un-install the transformer, and reverse it's position? Or, will the screws through the transformer body itself come out, so I can just reverse them?
Thanks for the input. I thought this was going to be a simple hour long job, like the last one. I guess not. Whatever I do, it's going to be long and arduous, me thinks.

Dan

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

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11786. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:28:44 UTC
From: Dan Galligan
Topic: 11783 Message: 11786

Don,
I'm having difficulty getting one of the screws to budge. I got the nut and star washer off, but the machine screw doesn't want to budge, even with some fairly solid tapping, on the thread end, with a screwdriver handle.
It looks like the board, with the standoffs installed, WILL BE too long for the opposite side of the transformer. I tend to think I am relegated to removal and reversal of the transformer. So I just took lots of digital photos.
Wish me luck!

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:23 PM, Don Cunningham <donc@...> wrote:

> Dan,
>
> I had to reverse the screws (bolts) on the transformer to put the one in that I did as well. It was a later serial number as yours is, so not sure if that makes a difference or not. I noticed no humm or vibrations with the transformer after that, so no ill effects to doing that unless someone knows more than I do about the transformers (entirely likely).
> 73,
> Don, WB5HAK
>
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[Non-text portions of this message have been removed]

11787. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:30:16 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 11787

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /AC-4/DSC07576_s.JPG
Uploaded by : wa6rkn <WA6RKN@...>
Description : AC-4

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/AC-4/DSC07576_s.JPG

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

wa6rkn <WA6RKN@...>

11788. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:30:43 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 11788

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /AC-4/DSC07577_s.JPG
Uploaded by : wa6rkn <WA6RKN@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/AC-4/DSC07577_s.JPG

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

wa6rkn <WA6RKN@...>

11789. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:32:24 UTC
From: Don Cunningham
Topic: 11783 Message: 11789

Can you get a screwdriver on the side of the transformer with a "head" on it?? I am thinking I may have had to "screw" one of the screws out of mine too, like it wasn't drilled the proper size.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11790. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:33:00 UTC
From: Joe
Topic: 11783 Message: 11790

I just uploaded what I did to solve the screw in the wrong side of the transformer issue......

In FILES, folder AC-4, 3 images.

Joe - WA6RKN

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
Subject: Re: [DrakeRadio] New question....

> Don,
> I'm having difficulty getting one of the screws to budge. I got the nut
> and star washer off, but the machine screw doesn't want to budge, even
> with some fairly solid tapping, on the thread end, with a screwdriver
> handle.

11791. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:33:53 UTC
From: Kris Merschrod
Topic: 11783 Message: 11791

Dan, do not force it, use a bigger hammer :>)

Seriously, I'd go for the transformer rotation - keep track of the wires though.

Kris KM2KM

----- Original Message -----
From: Dan Galligan
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 9:28 PM
Subject: Re: [DrakeRadio] New question....

Don,
I'm having difficulty getting one of the screws to budge. I got the nut and star washer off, but the machine screw doesn't want to budge, even with some fairly solid tapping, on the thread end, with a screwdriver handle.
It looks like the board, with the standoffs installed, WILL BE too long for the opposite side of the transformer. I tend to think I am relegated to removal and reversal of the transformer. So I just took lots of digital photos.
Wish me luck!

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:23 PM, Don Cunningham donc@...> wrote:

> Dan,
>
> I had to reverse the screws (bolts) on the transformer to put the one in that I did as well. It was a later serial number as yours is, so not sure if that makes a difference or not. I noticed no humm or vibrations with the transformer after that, so no ill effects to doing that unless someone knows more than I do about the transformers (entirely likely).
> 73,
> Don, WB5HAK
>
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11792. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:35:14 UTC
From: Dan Galligan
Topic: 11783 Message: 11792

Thanks to all, for the quick and helpful replies. These screws do not seem to want to budge. I think the transformer reversal will be the best option, at this point.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:33 PM, Joe <WA6RKN@...> wrote:

> I just uploaded what I did to solve the screw in the wrong side of the
> transformer issue......
>
> In FILES, folder AC-4, 3 images.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> Subject: Re: [DrakeRadio] New question....
>
>
>> Don,
>> I'm having difficulty getting one of the screws to budge. I got the nut
>> and star washer off, but the machine screw doesn't want to budge, even
>> with some fairly solid tapping, on the thread end, with a screwdriver
>> handle.
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> Yahoo! Groups Links
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11793. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:41:37 UTC
From: Dan Galligan
Topic: 11783 Message: 11793

Joe,
I like the idea! Not bad. The purists among us won't like it much, but it sure seems to be the simplest option.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:33 PM, Joe <WA6RKN@...> wrote:

> I just uploaded what I did to solve the screw in the wrong side of the
> transformer issue......
>
> In FILES, folder AC-4, 3 images.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> Subject: Re: [DrakeRadio] New question....
>
>
>> Don,
>> I'm having difficulty getting one of the screws to budge. I got the nut
>> and star washer off, but the machine screw doesn't want to budge, even
>> with some fairly solid tapping, on the thread end, with a screwdriver
>> handle.
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11794. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:52:30 UTC
From: Mike
Topic: 11783 Message: 11794

Don't do that!

Just mount the pcb on the end with the nuts.

Or.

Use "l" brackets to mount the pcb.

Or

Mount the pcb to the end wall of the chassis.

Don't rotate the transformer!
Way too much work
Too easy to mess up the wiring.

Mike wb8vge

Sent from my iPhone

On Feb 6, 2013, at 9:33 PM, "Kris Merschrod" <kris@...> wrote:

> Dan, do not force it, use a bigger hammer :>)
>
> Seriously, I'd go for the transformer rotation - keep track of the wires though.
>
> Kris KM2KM
>
> ----- Original Message -----
> From: Dan Galligan
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, February 06, 2013 9:28 PM
> Subject: Re: [DrakeRadio] New question....
>
> Don,
> I'm having difficulty getting one of the screws to budge. I got the nut and star washer off, but the machine screw doesn't want to budge, even with some fairly solid tapping, on the thread end, with a screwdriver handle.
> It looks like the board, with the standoffs installed, WILL BE too long for the opposite side of the transformer. I tend to think I am relegated to removal and reversal of the transformer. So I just took lots of digital photos.
> Wish me luck!
>
> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 6, 2013, at 6:23 PM, Don Cunningham donc@...> wrote:
>
> > Dan,
> >
> > I had to reverse the screws (bolts) on the transformer to put the one in that I did as well. It was a later serial number as yours is, so not sure if that makes a difference or not. I noticed no humm or vibrations with the transformer after that, so no ill effects to doing that unless someone knows more than I do about the transformers (entirely likely).
> > 73,
> > Don, WB5HAK
> >
> > [Non-text portions of this message have been removed]
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> > ------------------------------------
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> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11795. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 02:59:17 UTC
From: William Houghton
Topic: 11783 Message: 11795

Dan,

The screw heads might be covered in varnish or paint. You might have to break off that varnish or paint first. A center punch can be used to clear the varnish out of the screw head slot. Then you can use a flat blade bit from one of those driver bit sets and a 1/4 inch wrench to turn the screw head to loosen it. You might also be able to use the punch or a small chisel

to chip away the varnish around the head.

Another thing that might work is to screw the standoff on to the bolt but not all the way. Then turn the nut up against the standoff and tighten with a wrench. A lockwasher between the two would be great if there is enough room. Then turn the standoff to get the bolt to turn.

_____
From: Dan Galligan <w3rxo@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Wed, February 6, 2013 6:41:43 PM
Subject: Re: [DrakeRadio] New question....

Joe,
I like the idea! Not bad. The purists among us won't like it much, but it sure seems to be the simplest option.

Dan

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:33 PM, Joe WA6RKN@...m> wrote:

> I just uploaded what I did to solve the screw in the wrong side of the
> transformer issue......
>
> In FILES, folder AC-4, 3 images.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Dan Galligan" w3rxo@...>
> Subject: Re: [DrakeRadio] New question....
>
>
>> Don,

>> I'm having difficulty getting one of the screws to budge. I got the nut
>> and star washer off, but the machine screw doesn't want to budge, even
>> with some fairly solid tapping, on the thread end, with a screwdriver
>> handle.
>
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[Non-text portions of this message have been removed]

11796. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 03:05:36 UTC
From: Steve Wedge
Topic: 11767 Message: 11796

Yeah, tell me about it. Have gone through about 5 R-4B's, an R-4A, T-4X and 2 T-4XB's. Sick ones in, healthy ones out.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Kris Merschrod
Sent: Wednesday, February 06, 2013 8:15 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Case Screw sizes

Beware, those extra screws attract more rigs. Steve is proof of that - on his second bag. You just have to use them up on Drake cases. Henced the NEED for more rigs!

Kris KM2KM
----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 06, 2013 6:52 PM
Subject: Re: [DrakeRadio] Case Screw sizes

Dan, do you mean the screws that hold the covers on? Those are panhead and not flathead.

If that's what you're looking for, they're 6-32 and 3/8" long, IIRC. There's a vendor on eBay who sells them 50/$5. I'm already on my second bag of 'em

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Wednesday, February 06, 2013 2:59 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Case Screw sizes

The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb

w3rxo at mac dot com

"A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow

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11797. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 03:09:56 UTC
From: Steve Wedge
Topic: 11783 Message: 11797

I seem to recall from the instructions that many of the screws will not budge at all. He recommended mounting on the other side - which requires removal of the original caps.

The Transformer rotation seems to be a viable alternative. Mark the wires and remember that they're equivalent (two yellow, two red, etc.).

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Wednesday, February 06, 2013 9:35 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New question....

Thanks to all, for the quick and helpful replies. These screws do not seem to want to budge. I think the transformer reversal will be the best option, at this point.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 6, 2013, at 6:33 PM, Joe WA6RKN@...> wrote:

> I just uploaded what I did to solve the screw in the wrong side of the
> transformer issue......
>
> In FILES, folder AC-4, 3 images.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Dan Galligan" w3rxo@...>
> Subject: Re: [DrakeRadio] New question....
>
>
>> Don,
>> I'm having difficulty getting one of the screws to budge. I got the nut
>> and star washer off, but the machine screw doesn't want to budge, even
>> with some fairly solid tapping, on the thread end, with a screwdriver
>> handle.
>
>

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>
> Yahoo! Groups Links
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11798. Re: [DrakeRadio] Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 03:30:42 UTC
From: Robert Logan
Topic: 11767 Message: 11798

Some of mine are slotted, some Phillips. If I could have some of yours, at least they would match. I'm certainly willing to pay you for them, Chris. Thank you. Bob

Sent from my iPhone

On Feb 6, 2013, at 4:41 PM, vacuuminded2@... wrote:

Bob,
The ones I have here at work are Phillips head, whereas the originals were slotted. Dan actually wanted Phillips head instead, thus my offer. I do not have any slotted ones, although I may buy a box from the fellow on eBay or McMaster Carr sometime for my Drakes.

If you don't care and still want the Phillips ones I have, send me a note off-list.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 6, 2013, at 4:31 PM, Robert Logan bob.logan47@...> wrote:

> Chris, saw your email about the screws for the Drake
>
> My T4XC and R4 have mismatched screws including (ugh) shiny Phillips heads. I would like to take up your offer to the other fellow but would be glad to pay you for them. Can you do that?
>
> If so, my mailing address is
> Bob Logan, NZ5A
> 8712 Lone Tree Dr.
> Manor, TX 78653.
>
> Let me know your price and address and I'll send it right off.
>
> I would appreciate it very much. I am proud of my Drakes. Thank you.
>
> Bob
>
> Sent from my iPhone
>
> On Feb 6, 2013, at 2:27 PM, vacuuminded2@... wrote:
>
> I have black oxide, Phillips pan heads here in 6-32x1/4. Send me your address and I'll stick a dozen in an envelope for ya.
>
> Chris
>

> Sent from my outdated iPhone wireless thingy
>
> On Feb 6, 2013, at 2:24 PM, Dan Galligan w3rxo@...> wrote:
>
> > I simply prefer the philips head, because they get buggered up, less than straight blade. If I have to buy some, I might as well get the ones that are easier to work with, and less likely to get buggered. This TR-4, only had 6 screws, total, holding it together.
> >
> > Dan Galligan
> > W3RXO/W6
> > Pomona, CA
> > DM14cb
> > w3rxo at mac dot com
> >
> > "If you put the federal government in charge of the Sahara Desert, in five years there'd be a shortage of sand."
> > Milton Friedman
> >
> > On Feb 6, 2013, at 12:08 PM, vacuuminded2@... wrote:
> >
> > They're just plain 6-32 x /@1/4" head machine screws. Probably binder head. Why switch to Phillips, slotted ones are still common, in black even. Last I saw there was a ham on eBay selling lots of 50 for like $5.
> >
> > Regards,
> > Chris
> >
> > Sent from my outdated iPhone wireless thingy
> >
> > On Feb 6, 2013, at 1:59 PM, Dan Galligan w3rxo@...> wrote:
> >
> >> The TR-4 that I just purchased, is in need of a few case screws, so I thought I would buy all new ones, in a philips, pan head, rather than the original flat head. What is the size and thread pitch?
> >>
> >> Dan Galligan
> >> W3RXO/W6
> >> Pomona, CA
> >> DM14cb
> >> w3rxo at mac dot com
> >>
> >> "A Nation of Sheep will beget a Government of Wolves." --- Edward R. Murrow
> >>
> >> [Non-text portions of this message have been removed]
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11799. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 04:04:52 UTC
From: Richard Knoppow
Topic: 11783 Message: 11799

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 06, 2013 7:09 PM
Subject: Re: [DrakeRadio] New question....

>I seem to recall from the instructions that many of the
>screws will not budge at all. He recommended mounting on
>the other side - which requires removal of the original
>caps.
>
> The Transformer rotation seems to be a viable alternative.
> Mark the wires and remember that they're equivalent (two
> yellow, two red, etc.).
>
>
> Steve Wedge, W1ES/4
>

I still have a set of instructions. I removed the old
caps from mine, they serve no purpose and take up space. The
holes in the chassis are useful for running wires. What I
remember is that the instructions for assembling the circuit
board are fine but the instructions for installing it leave
a lot to be desired. I don't remember exactly what I found
but I do remember that mounting the board on the transformer
required some body English. I think I had to remove the
transformer mounting screws so I could tilt it a bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11800. Re: New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 04:38:27 UTC
From: qrper
Topic: 11783 Message: 11800

Gang,

like I said,

Don't remove the transformer and flip it. It's not a good idea!

The wires are old, the wires won't reach back to where they were connected. You'll have a mess on your hands.

install the pcb on the end that has the threaded transformer screws.

The red and yellow wires supplied in the kit will be too long, while the blue and green wires will be too short.

Or move the pcb to the end cap, drill four holes, and mount the pcb to the end.

A lot of guys use "L" brackets to mount the pcb to and that works great! There is a photo of that in the manual

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "Steve Wedge"
> To:
> Sent: Wednesday, February 06, 2013 7:09 PM
> Subject: Re: [DrakeRadio] New question....
>
>
> >I seem to recall from the instructions that many of the
> >screws will not budge at all. He recommended mounting on
> >the other side - which requires removal of the original
> >caps.
> >
> > The Transformer rotation seems to be a viable alternative.
> > Mark the wires and remember that they're equivalent (two
> > yellow, two red, etc.).
> >
> >
> > Steve Wedge, W1ES/4
> >
>
> I still have a set of instructions. I removed the old
> caps from mine, they serve no purpose and take up space. The
> holes in the chassis are useful for running wires. What I

> remember is that the instructions for assembling the circuit
> board are fine but the instructions for installing it leave
> a lot to be desired. I don't remember exactly what I found
> but I do remember that mounting the board on the transformer
> required some body English. I think I had to remove the
> transformer mounting screws so I could tilt it a bit.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

11801. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 04:43:35 UTC
From: Dan Galligan
Topic: 11783 Message: 11801

Okay. I got the transformer, rotated, and rewired, properly. Now I found something that I either should have checked first, or if I had taken Joe and Mike's advice, and mounted it on the end of the chassis, I would have avoided the work. It wasn't difficult, just time consuming, and tedious. For some unknown reason, this transformer has larger machine screws, with a completely different thread pitch. The standoffs will not thread on, and when I looked at a standoff, next to one of the machine screws, it was OBVIOUS that I was dealing with a different size screw. The standoffs are a 32 thread count pitch, and the screws holding the transformer together are a 24 thread count pitch.

So, now I am forced to do it Joe's way. I liked his idea, but I didn't want to actually modify the case. A drilled hole, can never really be refilled.

Thanks, for all of the information.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If ever a time should come, when vain and aspiring men shall possess the highest seats in Government, our country will stand in need of its experienced patriots to prevent its ruin"-Samuel Adams, Brewer/Patriot

On Feb 6, 2013, at 8:04 PM, Richard Knoppow wrote:

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 06, 2013 7:09 PM
Subject: Re: [DrakeRadio] New question....

> I seem to recall from the instructions that many of the
> screws will not budge at all. He recommended mounting on
> the other side - which requires removal of the original
> caps.
>
> The Transformer rotation seems to be a viable alternative.
> Mark the wires and remember that they're equivalent (two
> yellow, two red, etc.).
>
>
> Steve Wedge, W1ES/4
>

I still have a set of instructions. I removed the old
caps from mine, they serve no purpose and take up space. The

holes in the chassis are useful for running wires. What I
remember is that the instructions for assembling the circuit
board are fine but the instructions for installing it leave
a lot to be desired. I don't remember exactly what I found
but I do remember that mounting the board on the transformer
required some body English. I think I had to remove the
transformer mounting screws so I could tilt it a bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

Yahoo! Groups Links

11802. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 05:11:46 UTC
From: Dan Galligan
Topic: 11783 Message: 11802

This is getting ridiculous. The kit, does not fit, even with it mounted on the end. it is a good 1/4" to 3/16" shy of fitting in the intended location. I opened up the other AC-4, that I got with this radio, and it has a smaller transformer winding, by about 3/16", per side.

Did Drake use different transformers, from different suppliers, over time?

I am going to have to go to my local special fastener store, and buy some standoffs, that are maybe 3/8" shorter than those that came with the AC-4R kit.

Doggonnit, this is frustrating.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"It is error alone, which needs the support of government. Truth can stand by itself"
Thomas Jefferson

On Feb 6, 2013, at 8:43 PM, Dan Galligan wrote:

Okay. I got the transformer, rotated, and rewired, properly. Now I found something that I either should have checked first, or if I had taken Joe and Mike's advice, and mounted it on the end of the chassis, I would have avoided the work. It wasn't difficult, just time consuming, and tedious. For some unknown reason, this transformer has larger machine screws, with a completely different thread pitch. The standoffs will not thread on, and when I looked at a standoff, next to one of the machine screws, it was OBVIOUS that I was dealing with a different size screw. The standoffs are a 32 thread count pitch, and the screws holding the transformer together are a 24 thread count pitch.

So, now I am forced to do it Joe's way. I liked his idea, but I didn't want to actually modify the case. A drilled hole, can never really be refilled.

Thanks, for all of the information.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If ever a time should come, when vain and aspiring men shall possess the highest seats in Government, our country will stand in need of its experienced patriots to prevent its ruin"-Samuel Adams, Brewer/Patriot

On Feb 6, 2013, at 8:04 PM, Richard Knoppow wrote:

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 06, 2013 7:09 PM
Subject: Re: [DrakeRadio] New question....

> I seem to recall from the instructions that many of the
> screws will not budge at all. He recommended mounting on
> the other side - which requires removal of the original
> caps.
>
> The Transformer rotation seems to be a viable alternative.
> Mark the wires and remember that they're equivalent (two
> yellow, two red, etc.).
>
>
> Steve Wedge, W1ES/4
>

I still have a set of instructions. I removed the old
caps from mine, they serve no purpose and take up space. The
holes in the chassis are useful for running wires. What I
remember is that the instructions for assembling the circuit
board are fine but the instructions for installing it leave
a lot to be desired. I don't remember exactly what I found
but I do remember that mounting the board on the transformer
required some body English. I think I had to remove the
transformer mounting screws so I could tilt it a bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

Yahoo! Groups Links

Yahoo! Groups Links

11803. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 12:32:20 UTC
From: Steve Wedge
Topic: 11783 Message: 11803

Mounting the board is where my field service experience came in handy: I knew to leave the standoffs loosely attached until everything was more or less together.

The wiring instructions are the way they are because there seem to be some supplies with different colors in the wiring. Trying to describe wire routing is a verbal minefield. I know this from writing tech bulletins and ECO's. Pics are always better and assembly drawings best.

My $0.02

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Wednesday, February 06, 2013 11:04 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New question....

----- Original Message -----
From: "Steve Wedge" w1es1982@...>
To: DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 06, 2013 7:09 PM
Subject: Re: [DrakeRadio] New question....

>I seem to recall from the instructions that many of the
>screws will not budge at all. He recommended mounting on
>the other side - which requires removal of the original
>caps.
>
> The Transformer rotation seems to be a viable alternative.
> Mark the wires and remember that they're equivalent (two
> yellow, two red, etc.).
>
>
> Steve Wedge, W1ES/4
>

I still have a set of instructions. I removed the old
caps from mine, they serve no purpose and take up space. The
holes in the chassis are useful for running wires. What I
remember is that the instructions for assembling the circuit
board are fine but the instructions for installing it leave
a lot to be desired. I don't remember exactly what I found
but I do remember that mounting the board on the transformer

required some body English. I think I had to remove the
transformer mounting screws so I could tilt it a bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

11804. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 12:34:51 UTC
From: Steve Wedge
Topic: 11783 Message: 11804

Dan, you could try re-tapping the threads in the standoffs. Won't be the neatest but will probably hold. Alternative is to get some standoffs in the correct size.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Wednesday, February 06, 2013 11:43 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New question....

Okay. I got the transformer, rotated, and rewired, properly. Now I found something that I either should have checked first, or if I had taken Joe and Mike's advice, and mounted it on the end of the chassis, I would have avoided the work. It wasn't difficult, just time consuming, and tedious. For some unknown reason, this transformer has larger machine screws, with a completely different thread pitch. The standoffs will not thread on, and when I looked at a standoff, next to one of the machine screws, it was OBVIOUS that I was dealing with a different size screw. The standoffs are a 32 thread count pitch, and the screws holding the transformer together are a 24 thread count pitch.

So, now I am forced to do it Joe's way. I liked his idea, but I didn't want to actually modify the case. A drilled hole, can never really be refilled.

Thanks, for all of the information.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If ever a time should come, when vain and aspiring men shall possess the highest seats in Government, our country will stand in need of its experienced patriots to prevent its ruin"-Samuel Adams, Brewer/Patriot

On Feb 6, 2013, at 8:04 PM, Richard Knoppow wrote:

----- Original Message -----
From: "Steve Wedge" w1es1982@...>
To: DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 06, 2013 7:09 PM
Subject: Re: [DrakeRadio] New question....

> I seem to recall from the instructions that many of the
> screws will not budge at all. He recommended mounting on

> the other side - which requires removal of the original
> caps.
>
> The Transformer rotation seems to be a viable alternative.
> Mark the wires and remember that they're equivalent (two
> yellow, two red, etc.).
>
>
> Steve Wedge, W1ES/4
>

I still have a set of instructions. I removed the old
caps from mine, they serve no purpose and take up space. The
holes in the chassis are useful for running wires. What I
remember is that the instructions for assembling the circuit
board are fine but the instructions for installing it leave
a lot to be desired. I don't remember exactly what I found
but I do remember that mounting the board on the transformer
required some body English. I think I had to remove the
transformer mounting screws so I could tilt it a bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11805. Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 15:02:45 UTC
From: Al Schichler
Topic: 11767 Message: 11805

If anyone has a few extra of the black slotted-type 6-32 screws, i would be interested in buying about 5 of them. I just acquired an R-4A that is missing all the top cabinet screws.

Thanks,
Al, WA2S

11806. Re: 2B Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 16:09:19 UTC
From: Mark Brueggemann
Topic: 11727 Message: 11806

Thanks everyone so far on and offline for the leads on 2B knobs. It seems they're as rare as hen's teeth as they appear. I think I will just restore the one I have.

Mark K5LXP
Albuquerque, NM

11807. Re: [DrakeRadio] Re: 2B Tuning Knob

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 16:15:26 UTC
From: Jim Shorney
Topic: 11727 Message: 11807

One note that I don't think has been mentioned, Jackson 600-series tube testers used a very similar knob style as the 2-line receivers. I don't know if the big knobs are close enough for you tuning knob, but many of the small knobs look like exact matches. If you can find , i.e., a Jackson 658 in good condition, I don't think people would get as wound up about snitching the knobs as if it were a classic radio.... ;)

73

-Jim
NU0C

On Thu, 7 Feb 2013 08:09:19 -0800 (PST), Mark Brueggemann wrote:

>Thanks everyone so far on and offline for the leads on 2B knobs. It seems they're as rare as hen's teeth as they appear. I think I will just restore the one I have.
>
>
>Mark K5LXP
>Albuquerque, NM
>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

11808. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 16:29:03 UTC
From: Joe
Topic: 11783 Message: 11808

I just went down to my commercial screw and fastener supply and bought the standoff's and screws. $5.00 and I purchased several sizes, just in case my measurements were off a bit...I know I didn't use any of the stand-offs that came in the kit. I marked the spots to drill the holes before I built the PCB and center punched each spot so the drill would be accurate. Yeah I know, for purists, it violates the appearance of the supply, but it is mounted inside the speaker housing, so I wasn't concerned about that. (The different colored wiring *was* an issue though.....fortunately, I had a second supply I could refer to so mental crisis averted! HEH.)

Joe - WA6RKN

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
Subject: Re: [DrakeRadio] New question....

> Dan, you could try re-tapping the threads in the standoffs. Won't be the
> neatest but will probably hold. Alternative is to get some standoffs in
> the correct size.

11809. Fwd: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 17:39:02 UTC
From: Dan Galligan
Topic: 11809 Message: 11809

After rotating the transformer, I went to install it, leaving the standoffs very loosely attached to the board. No-go. The two 150uF/450v caps at the top of this board, are longer and narrower, than those in Joe's photos. My transformer doesn't seem to be as old, or as large as Joe's, and is completely coated in black wax/tar, of some sort.
I have the holes drilled, for end of case installation, and I moved the terminal lug strips, to the same locations on the underside, as are shown in the installation instructions. I am certain that I got the wires back to the correct lugs, on the terminals. I DID have to lengthen a couple of the wires. Thankfully, I have plenty of wire, solder and heat shrink tubing.
But, still no fit. It must be the length issue on the two 150uF/450v caps. So, before I try anything else, I will do as Joe suggested, and take a trip to King Bolt, the local fastener superstore, and buy more standoffs, of shorter lengths, to install this. Thank goodness this AC-4R kit came, included with the radio, or I would be pitching a fit, right now, with the maker.
The friend whom I bought this from, bought the pre-assembled kit, so I'm not sure what he spent. Whatever it was, it was too much for this much trouble.
Thanks for all of the help and suggestions.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 8:29 AM, Joe <WA6RKN@...> wrote:

> I just went down to my commercial screw and fastener supply and bought the
> standoff's and screws. $5.00 and I purchased several sizes, just in case my
> measurements were off a bit...I know I didn't use any of the stand-offs that
> came in the kit. I marked the spots to drill the holes before I built the
> PCB and center punched each spot so the drill would be accurate. Yeah I
> know, for purists, it violates the appearance of the supply, but it is
> mounted inside the speaker housing, so I wasn't concerned about that. (The
> different colored wiring *was* an issue though.....fortunately, I had a
> second supply I could refer to so mental crisis averted! HEH.)
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> Subject: Re: [DrakeRadio] New question....

>
>
>> Dan, you could try re-tapping the threads in the standoffs. Won't be the
>> neatest but will probably hold. Alternative is to get some standoffs in
>> the correct size.
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[Non-text portions of this message have been removed]

11810. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 19:18:49 UTC
From: Barry
Topic: 11809 Message: 11810

If clearance is that much of an issue, why not just use some thick nylon washers between the PCB and the chassis and use ordinary screws?

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, February 7, 2013 11:39:02 AM
> Subject: Fwd: [DrakeRadio] New question....
>
> After rotating the transformer, I went to install it, leaving the
> standoffs very loosely attached to the board. No-go. The two
> 150uF/450v caps at the top of this board, are longer and narrower,
> than those in Joe's photos. My transformer doesn't seem to be as
> old, or as large as Joe's, and is completely coated in black
> wax/tar, of some sort.
> I have the holes drilled, for end of case installation, and I moved
> the terminal lug strips, to the same locations on the underside, as
> are shown in the installation instructions. I am certain that I got
> the wires back to the correct lugs, on the terminals. I DID have to
> lengthen a couple of the wires. Thankfully, I have plenty of wire,
> solder and heat shrink tubing.
> But, still no fit. It must be the length issue on the two 150uF/450v
> caps. So, before I try anything else, I will do as Joe suggested,
> and take a trip to King Bolt, the local fastener superstore, and buy
> more standoffs, of shorter lengths, to install this. Thank goodness
> this AC-4R kit came, included with the radio, or I would be pitching
> a fit, right now, with the maker.
> The friend whom I bought this from, bought the pre-assembled kit, so
> I'm not sure what he spent. Whatever it was, it was too much for
> this much trouble.
> Thanks for all of the help and suggestions.
>
> 73,
> Dan

11811. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 19:35:56 UTC
From: Dan Galligan
Topic: 11809 Message: 11811

Barry,
It may come down to that. I even thought of putting a thin later of dense foam rubber in there, and then screws, to hold it in place. Or, even some good 3M double sided mounting tape. But, since it will only be a few bucks, I think I'll try the shorter standoffs, first. But, yes. Your suggestion, is definitely another option.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 11:18 AM, Barry <n4buq@...> wrote:

> If clearance is that much of an issue, why not just use some thick nylon washers between the PCB and the chassis and use ordinary screws?
>
> Regards,
> Barry - N4BUQ
>
> ----- Original Message -----
>> From: "Dan Galligan" <w3rxo@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Thursday, February 7, 2013 11:39:02 AM
>> Subject: Fwd: [DrakeRadio] New question....
>>
>> After rotating the transformer, I went to install it, leaving the
>> standoffs very loosely attached to the board. No-go. The two
>> 150uF/450v caps at the top of this board, are longer and narrower,
>> than those in Joe's photos. My transformer doesn't seem to be as
>> old, or as large as Joe's, and is completely coated in black
>> wax/tar, of some sort.
>> I have the holes drilled, for end of case installation, and I moved
>> the terminal lug strips, to the same locations on the underside, as
>> are shown in the installation instructions. I am certain that I got
>> the wires back to the correct lugs, on the terminals. I DID have to
>> lengthen a couple of the wires. Thankfully, I have plenty of wire,
>> solder and heat shrink tubing.
>> But, still no fit. It must be the length issue on the two 150uF/450v
>> caps. So, before I try anything else, I will do as Joe suggested,
>> and take a trip to King Bolt, the local fastener superstore, and buy

>> more standoffs, of shorter lengths, to install this. Thank goodness
>> this AC-4R kit came, included with the radio, or I would be pitching
>> a fit, right now, with the maker.
>> The friend whom I bought this from, bought the pre-assembled kit, so
>> I'm not sure what he spent. Whatever it was, it was too much for
>> this much trouble.
>> Thanks for all of the help and suggestions.
>>
>> 73,
>> Dan
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[Non-text portions of this message have been removed]

11812. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 19:42:09 UTC
From: vacuuminded2@...
Topic: 11809 Message: 11812

Holy career out of a project, batman! Sounds like you've created a nightmare!
Maybe I'm missing something, but didn't this whole thing stem from the screws holding the transformer together being on the "wrong" side? Will the kit not fit where it was originally intended, if you got the screws out? If they're stuck in place and won't TAP out, then try unscrewing them. If the laminations or bells are pinching them in that tight, they ought to simply unscrew once the nuts are removed, as if it were a threaded hole.

Chris

Sent from my outdated iPhone wireless thingy

On Feb 7, 2013, at 1:35 PM, Dan Galligan <w3rxo@...> wrote:

> Barry,
> It may come down to that. I even thought of putting a thin later of dense foam rubber in there, and then screws, to hold it in place. Or, even some good 3M double sided mounting tape. But, since it will only be a few bucks, I think I'll try the shorter standoffs, first. But, yes. Your suggestion, is definitely another option.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 7, 2013, at 11:18 AM, Barry n4buq@...> wrote:
>
> > If clearance is that much of an issue, why not just use some thick nylon washers between the PCB and the chassis and use ordinary screws?
> >
> > Regards,
> > Barry - N4BUQ
> >
> > ----- Original Message -----
> >> From: "Dan Galligan" w3rxo@...>
> >> To: DrakeRadio@yahoogroups.com
> >> Sent: Thursday, February 7, 2013 11:39:02 AM
> >> Subject: Fwd: [DrakeRadio] New question....
> >>
> >> After rotating the transformer, I went to install it, leaving the
> >> standoffs very loosely attached to the board. No-go. The two

> >> 150uF/450v caps at the top of this board, are longer and narrower,
> >> than those in Joe's photos. My transformer doesn't seem to be as
> >> old, or as large as Joe's, and is completely coated in black
> >> wax/tar, of some sort.
> >> I have the holes drilled, for end of case installation, and I moved
> >> the terminal lug strips, to the same locations on the underside, as
> >> are shown in the installation instructions. I am certain that I got
> >> the wires back to the correct lugs, on the terminals. I DID have to
> >> lengthen a couple of the wires. Thankfully, I have plenty of wire,
> >> solder and heat shrink tubing.
> >> But, still no fit. It must be the length issue on the two 150uF/450v
> >> caps. So, before I try anything else, I will do as Joe suggested,
> >> and take a trip to King Bolt, the local fastener superstore, and buy
> >> more standoffs, of shorter lengths, to install this. Thank goodness
> >> this AC-4R kit came, included with the radio, or I would be pitching
> >> a fit, right now, with the maker.
> >> The friend whom I bought this from, bought the pre-assembled kit, so
> >> I'm not sure what he spent. Whatever it was, it was too much for
> >> this much trouble.
> >> Thanks for all of the help and suggestions.
> >>
> >> 73,
> >> Dan
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11813. FS TR3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 19:58:57 UTC
From: hglent
Topic: 11813 Message: 11813

I recently acquired a TR3 setup from a SKs widow. It is about a 7 cosmetically with the usual chassis dirt. I have had this rig on 40 and 10 meters SSB with excellent reports.

In addition I got a home brew AC Power Supply with it. The SK was a engineer in Oak Ridge, and the power supply reflects his expertise and skills. The design and selection of parts is superb and his construction practices among the best I've ever seen.

As usual, when dealing with a bereaved spouse, I paid too much for the setup. I figured I would offer it here to fellow Drake enthusiasts before putting it on Ebay.

If you have any interest in this TR3 set up please contact me off list wa0bag@...

TNX es 73

Paul K.
WA0BAG

11814. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 20:06:20 UTC
From: Joe
Topic: 11783 Message: 11814

Chris, each transformer has it own set of issues..on mine, the screws were cut off at the nut, and the flared (pinched) and of the screw, prevented the removal of the nut. I wasn't about to spend 5 days getting 4 nuts off and then finding long screws to replace the damaged ones. Drilling the holes in the end of the case and mounting the kit there was the quickest, easiest, and most secure way of doing things, in my book. Having spent time in the service, I believe wholeheartedly in the K.I.S.S. method of doing things!

Joe - WA6RKN

----- Original Message -----
From: <vacuuminded2@...>
Subject: Re: [DrakeRadio] New question....

> Holy career out of a project, batman! Sounds like you've created a
> nightmare!
> Maybe I'm missing something, but didn't this whole thing stem from the
> screws holding the transformer together being on the "wrong" side? Will
> the kit not fit where it was originally intended, if you got the screws
> out? If they're stuck in place and won't TAP out, then try unscrewing
> them. If the laminations or bells are pinching them in that tight, they
> ought to simply unscrew once the nuts are removed, as if it were a
> threaded hole.

11815. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 20:35:13 UTC
From: Dan Galligan
Topic: 11783 Message: 11815

Chris,
I tried to remove them, with the nuts removed, and the transformer out of the case, but they simply will not budge. The heads were starting to peen over, from the (proper sized) straight blade screwdriver, that's when I decided to simply mount it on the end. Beside, the standoffs, which were included, were a completely different thread size and pitch, pattern.

But, no, it simply will not fit, in the location it was supposed to fit, unless I use standoffs AT LEAST 1/4" shorter. So, now that the holes are drilled in the end of the case, I'll just use shorter standoffs, and it will be done.

But, the other AC-4 that I have here in CA, and one of the two, at my house in OK, will be getting a kit, that one of the members here, is designing. I am not going to be a fan of the Heathkit Shop's kit, henceforth. The one I did the Hayseed kit on, turned out nice, and the owner is very happy with it. But Tom's kit is designed to replicate the original look, and has some specially made can caps, therefore, it costs even more than the Heathkit Shop's kit.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 12:06 PM, Joe <WA6RKN@...> wrote:

> Chris, each transformer has it own set of issues..on mine, the screws were
> cut off at the nut, and the flared (pinched) and of the screw, prevented the
> removal of the nut. I wasn't about to spend 5 days getting 4 nuts off and
> then finding long screws to replace the damaged ones. Drilling the holes in
> the end of the case and mounting the kit there was the quickest, easiest,
> and most secure way of doing things, in my book. Having spent time in the
> service, I believe wholeheartedly in the K.I.S.S. method of doing things!
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: <vacuuminded2@...>
> Subject: Re: [DrakeRadio] New question....
>
>
>> Holy career out of a project, batman! Sounds like you've created a
>> nightmare!
>> Maybe I'm missing something, but didn't this whole thing stem from the
>> screws holding the transformer together being on the "wrong" side? Will
>> the kit not fit where it was originally intended, if you got the screws

>> out? If they're stuck in place and won't TAP out, then try unscrewing
>> them. If the laminations or bells are pinching them in that tight, they
>> ought to simply unscrew once the nuts are removed, as if it were a
>> threaded hole.
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11816. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 20:47:13 UTC
From: Mike
Topic: 11809 Message: 11816

Dan,

I charge $15 to assemble the kit.

I think that's a fair price for an hour of bench time.

The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.

There should not be a fitment problem.

Mike wb8vge

Sent from my iPhone

On Feb 7, 2013, at 12:39 PM, Dan Galligan <w3rxo@...> wrote:

> After rotating the transformer, I went to install it, leaving the standoffs very loosely attached to the board. No-go. The two 150uF/450v caps at the top of this board, are longer and narrower, than those in Joe's photos. My transformer doesn't seem to be as old, or as large as Joe's, and is completely coated in black wax/tar, of some sort.
> I have the holes drilled, for end of case installation, and I moved the terminal lug strips, to the same locations on the underside, as are shown in the installation instructions. I am certain that I got the wires back to the correct lugs, on the terminals. I DID have to lengthen a couple of the wires. Thankfully, I have plenty of wire, solder and heat shrink tubing.
> But, still no fit. It must be the length issue on the two 150uF/450v caps. So, before I try anything else, I will do as Joe suggested, and take a trip to King Bolt, the local fastener superstore, and buy more standoffs, of shorter lengths, to install this. Thank goodness this AC-4R kit came, included with the radio, or I would be pitching a fit, right now, with the maker.
> The friend whom I bought this from, bought the pre-assembled kit, so I'm not sure what he spent. Whatever it was, it was too much for this much trouble.
> Thanks for all of the help and suggestions.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
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[Non-text portions of this message have been removed]

11817. Re: [DrakeRadio] AC4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 21:10:13 UTC
From: Chgypsy@...
Topic: 11817 Message: 11817

Hi all,

Considering all the ruckus.

I have a nice functional AC4 power supply, SN 34607 that I can sell as I do not use it anymore. All of my 3 & 4 stuff has gone away, and I just sold the other one (with an AC4-R kit installed) to a fellow ham not long ago. Had two 3's including one of the originals a while back ...geez that's years.

All original insides, the bolts in the transformer are turned the correct way for your AC4-R kit when you decide to. I can pull the nuts off if you like and check thread size.

The cables are all in good shape. There are four Drake plastic feet on the bottom. All phillips head screws (not black)
The case is not bent up, pictures if you like. I just took the cover off to make sure of the transformer screw orientation. So right now its off.

The price is $100 plus shipping. Now if you want the AC4-R kit already installed it will be $200 plus shipping.
We can work around the shipping if you want to pick it up at the Dayton Hamvention.
Carl WD8NHK

[Non-text portions of this message have been removed]

11818. Re: [DrakeRadio] AC4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 21:14:52 UTC
From: Joe
Topic: 11817 Message: 11818

You are in Ohio...wonder how much it would cost to ship to Reno, Nevada. If reasonable, I would be interested....

Joe - WA6RKN

----- Original Message -----
From: <Chgypsy@...>
Subject: Re: [DrakeRadio] AC4 For Sale

> Hi all,
>
> Considering all the ruckus.
>
> I have a nice functional AC4 power supply, SN 34607 that I can sell as I
> do not use it anymore. All of my 3 & 4 stuff has gone away, and I just
> sold
> the other one (with an AC4-R kit installed) to a fellow ham not long ago.
> Had two 3's including one of the originals a while back ...geez that's
> years.
>
> All original insides, the bolts in the transformer are turned the correct
> way for your AC4-R kit when you decide to. I can pull the nuts off if you
> like and check thread size.
>
> The cables are all in good shape. There are four Drake plastic feet on
> the bottom. All phillips head screws (not black)
> The case is not bent up, pictures if you like. I just took the cover off
> to make sure of the transformer screw orientation. So right now its off.
>
> The price is $100 plus shipping. Now if you want the AC4-R kit already
> installed it will be $200 plus shipping.
> We can work around the shipping if you want to pick it up at the Dayton
> Hamvention.
> Carl WD8NHK
>
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11819. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 21:20:10 UTC
From: Dan Galligan
Topic: 11809 Message: 11819

Mike,
I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design. It's simply a matter of difference in the product it is designed to go in.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 12:47 PM, Mike <prosolar@...> wrote:

> Dan,
>
> I charge $15 to assemble the kit.
>
> I think that's a fair price for an hour of bench time.
>
> The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.
>
> There should not be a fitment problem.
>
> Mike wb8vge
>
> Sent from my iPhone
>
> On Feb 7, 2013, at 12:39 PM, Dan Galligan <w3rxo@...> wrote:
>
>> After rotating the transformer, I went to install it, leaving the standoffs very loosely attached to the board. No-go. The two 150uF/450v caps at the top of this board, are longer and narrower, than those in Joe's photos. My transformer doesn't seem to be as old, or as

large as Joe's, and is completely coated in black wax/tar, of some sort.
>> I have the holes drilled, for end of case installation, and I moved the terminal lug strips, to the same locations on the underside, as are shown in the installation instructions. I am certain that I got the wires back to the correct lugs, on the terminals. I DID have to lengthen a couple of the wires. Thankfully, I have plenty of wire, solder and heat shrink tubing.
>> But, still no fit. It must be the length issue on the two 150uF/450v caps. So, before I try anything else, I will do as Joe suggested, and take a trip to King Bolt, the local fastener superstore, and buy more standoffs, of shorter lengths, to install this. Thank goodness this AC-4R kit came, included with the radio, or I would be pitching a fit, right now, with the maker.
>> The friend whom I bought this from, bought the pre-assembled kit, so I'm not sure what he spent. Whatever it was, it was too much for this much trouble.
>> Thanks for all of the help and suggestions.
>>
>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
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[Non-text portions of this message have been removed]

11820. Re: [DrakeRadio] AC4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 21:35:24 UTC
From: Chgypsy@...
Topic: 11817 Message: 11820

WA6RKN@... writes:

You are in Ohio...wonder how much it would cost to ship to Reno, Nevada.
If
reasonable, I would be interested....
Joe - WA6RKN
Joe,
I had not envisioned a response, but.....

They are heavy, so just for grins I took it up to the bathroom weight
maybe scale and it said a bit less than 18 lbs. Now add in a couple for
shipping and round it off to 20. Carl wd8nhk

[Non-text portions of this message have been removed]

11821. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 21:49:36 UTC
From: Mike
Topic: 11809 Message: 11821

Dan

Would you like me to send you a pair of shorter caps?

They're about an half an inch maybe shorter but rated at the original value of 120 mfd.

I have some 1/4 inch standoff I can send if that would help.

Here a hint if you mounted the pcb on the end cap. Mount the standoffs first leaving them loose then slip in the pcb.

And while I guess it's too late the pcb should be mounted toward the top of the end cap as high as possible.

Like I said I've sold over a thousand of these kits. 90% of the problems can be traced to wiring issues. Drake simply didn't use he same color if wire or even the way the supply had been wire.

Your problem with fitment is the first one had I heard about.

Bottom line is simple.

I want you to be happy with my product

Mike wb8vge. The heathkitshop.

Sent from my iPhone

On Feb 7, 2013, at 4:20 PM, Dan Galligan <w3rxo@...> wrote:

> Mike,
> I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
> I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
> Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design. It's simply a matter of difference in the product it is designed to go in.
>

> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
>
> > Dan,
> >
> > I charge $15 to assemble the kit.
> >
> > I think that's a fair price for an hour of bench time.
> >
> > The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.
> >
> > There should not be a fitment problem.
> >
> > Mike wb8vge
> >
> > Sent from my iPhone
> >
> >
>
>

[Non-text portions of this message have been removed]

11822. Fwd: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 22:08:49 UTC
From: Dan Galligan
Topic: 11809 Message: 11822

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

Dan
>>
>> Would you like me to send you a pair of shorter caps?
>
> Thanks, but no sense.
>>
>> They're about an half an inch maybe shorter but rated at the original value of 120 mfd.
>>
>> I have some 1/4 inch standoff I can send if that would help.
>
> It will be easier for me to just grab some at the store I mentioned.
>>
>> Here a hint if you mounted the pcb on the end cap. Mount the standoffs first leaving them loose then slip in the pcb.
>
> Tried that too, that was an even more impossible fit, than very loosely mounting the screws to the PCB, and trying to get it in. Believe me, I tried every possible method, without modifying the board, or standoffs, before I measured. The measurement is clear, that it will not fit. It is, most definitely, nearly 1/4" too long at those two caps.
>>
>> And while I guess it's too late the pcb should be mounted toward the top of the end cap as high as possible.
>
> Yes, it is. I had the thought in mind, when I went to try that method that if it were tight, maybe I could mount it above the transformer windings. No go.
>>
>> Like I said I've sold over a thousand of these kits. 90% of the problems can be traced to wiring issues. Drake simply didn't use he same color if wire or even the way the supply had been wire.
>>
>> Your problem with fitment is the first one had I heard about.
>
> That may be, but doesn't negate the fact that this one doesn't fit.
>>
>> Bottom line is simple.
>>
>> I want you to be happy with my product
>
> Mike, once it is installed, and properly working, I am certain that I will be happy with it. My only reason for trying the other design, is because it has been offered at a price

better than your's, as I will be a "guinea pig", and the designer says he believes it will run relatively cooler. So, it's worth a shot.
>>
>> Mike wb8vge. The heathkitshop.
> Thanks for expeditiously trying to rectify the issue. I don't believe it is your fault. My best guess is that Drake likely had transformers coming from multiple sources, and mine in one of a few anomalies. The terminal lug strips, on the underside were not positioned anywhere near what your photos showed, but were still easy to identify, and the holes were there, for me to move them to where they show in your photos, making for a better installation, in my estimation.
>
> Thanks,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>>
>> Sent from my iPhone
>>
>> On Feb 7, 2013, at 4:20 PM, Dan Galligan <w3rxo@...> wrote:
>>
>>> Mike,
>>> I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
>>> I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
>>> Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design. It's simply a matter of difference in the product it is designed to go in.
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>>> Dan
>>>
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>>> Sent from my somewhat brighter, larger, electronic leash.
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>>> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
>>>
>>>> Dan,
>>>>
>>>> I charge $15 to assemble the kit.

>>>>
>>>> I think that's a fair price for an hour of bench time.
>>>>
>>>> The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.
>>>>
>>>> There should not be a fitment problem.
>>>>
>>>> Mike wb8vge
>>>>
>>>> Sent from my iPhone
>>
>>
>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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11823. Re: [DrakeRadio] Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-07 23:07:15 UTC
From: K4GM-George
Topic: 11767 Message: 11823

I think I could help. Just bought a pouch of 50!

George K4GM

On 2/7/2013 10:02 AM, Al Schichler wrote:
>
> If anyone has a few extra of the black slotted-type 6-32 screws, i would
> be interested in buying about 5 of them. I just acquired an R-4A that is
> missing all the top cabinet screws.
>
> Thanks,
> Al, WA2S
>
>

[Non-text portions of this message have been removed]

11824. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 00:30:31 UTC
From: Richard Knoppow
Topic: 11783 Message: 11824

```
----- Original Message -----
From: "Mike" <prosolar@...>
To: <DrakeRadio@yahoogroups.com>
Cc: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 07, 2013 1:49 PM
Subject: Re: [DrakeRadio] New question....

> Dan
>
> Would you like me to send you a pair of shorter caps?
>
> They're about an half an inch maybe shorter but rated at
> the original value of 120 mfd.
>
> I have some 1/4 inch standoff I can send if that would
> help.
>
> Here a hint if you mounted the pcb on the end cap. Mount
> the standoffs first leaving them loose then slip in the
> pcb.
>
> And while I guess it's too late the pcb should be mounted
> toward the top of the end cap as high as possible.
>
> Like I said I've sold over a thousand of these kits. 90%
> of the problems can be traced to wiring issues. Drake
> simply didn't use he same color if wire or even the way
> the supply had been wire.
>
> Your problem with fitment is the first one had I heard
> about.
>
> Bottom line is simple.
>
> I want you to be happy with my product
>
> Mike wb8vge. The heathkitshop.
>
> Sent from my iPhone
>
> On Feb 7, 2013, at 4:20 PM, Dan Galligan <w3rxo@...>
> wrote:\

Its too long ago so my memory is not perfect; I think
the problem I had in installing was due mostly to my having
```

NOT made a drawing of the old wiring first. I had some difficulty in figuring out what went where. This is probably due to Drake having made different versions of the supply. I don't remember about fitting the circuit board to the transformer but I think it went on OK. There was enough wire in the kit to fix the wiring, I think actually I re-used more than the kit instructions indicated that I could. I also removed all the old caps and other unused parts.
I did get misled by the voltages; those in my supply and in another modified by someone else, are lower than indicated in the instructions. I think those are a bit optimistic. The modified supply works fine and has been in service for a while now. I would certainly buy another kit if I got another AC-4.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11825. Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 01:54:25 UTC
From: Steve Wedge
Topic: 11825 Message: 11825

http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Late-SN-s-/310583559276?ssPageName=ADME:B:WNA:US:1123

They look nice, but it's with an AC-3. Highest price I've seen for a non-Sherwood set! I guess all you really need are two people who REALLY want it.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

11826. Re: [DrakeRadio] AC4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 01:58:57 UTC
From: Steve Wedge
Topic: 11817 Message: 11826

18 lbs is typical of what my shipping weights have been for these.

Be sure to check the current rates if using USPS: their rates just went up.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Chgypsy@...
Sent: Thursday, February 07, 2013 4:35 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] AC4 For Sale

WA6RKN@... writes:

You are in Ohio...wonder how much it would cost to ship to Reno, Nevada.
If
reasonable, I would be interested....
Joe - WA6RKN
Joe,
I had not envisioned a response, but.....

They are heavy, so just for grins I took it up to the bathroom weight
maybe scale and it said a bit less than 18 lbs. Now add in a couple for
shipping and round it off to 20. Carl wd8nhk

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11827. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:02:26 UTC
From: Steve Wedge
Topic: 11809 Message: 11827

I'm starting to wonder if this supply had had a different transformer installed. Weren't a lot of old tube-type TV transformers similar?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mike
Sent: Thursday, February 07, 2013 4:49 PM
To: DrakeRadio@yahoogroups.com
Cc: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New question....

Dan

Would you like me to send you a pair of shorter caps?

They're about an half an inch maybe shorter but rated at the original value of 120 mfd.

I have some 1/4 inch standoff I can send if that would help.

Here a hint if you mounted the pcb on the end cap. Mount the standoffs first leaving them loose then slip in the pcb.

And while I guess it's too late the pcb should be mounted toward the top of the end cap as high as possible.

Like I said I've sold over a thousand of these kits. 90% of the problems can be traced to wiring issues. Drake simply didn't use he same color if wire or even the way the supply had been wire.

Your problem with fitment is the first one had I heard about.

Bottom line is simple.

I want you to be happy with my product

Mike wb8vge. The heathkitshop.

Sent from my iPhone

On Feb 7, 2013, at 4:20 PM, Dan Galligan w3rxo@...> wrote:

> Mike,
> I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
> I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't

know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
> Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design. It's simply a matter of difference in the product it is designed to go in.
>
> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
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> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
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> > Dan,
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> > I charge $15 to assemble the kit.
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> > I think that's a fair price for an hour of bench time.
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> > The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.
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> > There should not be a fitment problem.
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> > Mike wb8vge
> >
> > Sent from my iPhone
> >
> >
>
>

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[Non-text portions of this message have been removed]

11828. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:17:51 UTC
From: Wayne Smith
Topic: 11825 Message: 11828

Wow. I have one like it. Maybe I should sell it! The one I acquired was sold as a TR-44C. And I paid a LOT less!

Wayne
K5FEX

Sent from my iPhone

On Feb 7, 2013, at 7:54 PM, "Steve Wedge" <w1es1982@...> wrote:

> http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Late-SN-s-/310583559276?ssPageName=ADME:B:WNA:US:1123
>
> They look nice, but it's with an AC-3. Highest price I've seen for a non-Sherwood set! I guess all you really need are two people who REALLY want it.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

11829. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:32:34 UTC
From: William Houghton
Topic: 11825 Message: 11829

ok, what is a TR-44C ?

From: Wayne Smith <oilieone@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Thu, February 7, 2013 6:18:01 PM
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

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Wayne
K5FEX

Sent from my iPhone

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3559276?ssPageName=ADME:B:WNA:US:1123
>3
>
> They look nice, but it's with an AC-3. Highest price I've seen for a
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> All my computers have my signature with various pearls of wisdom appended
>thereto.
>
> [Non-text portions of this message have been removed]
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>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11830. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:38:49 UTC
From: Paul Kraemer
Topic: 11783 Message: 11830

Not even close
Sent from someone who grew up with tv from the 50's until they got solid
stated
Paul K0UYA
----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 07, 2013 8:02 PM
Subject: Re: [DrakeRadio] New question....

> I'm starting to wonder if this supply had had a different transformer
> installed. Weren't a lot of old tube-type TV transformers similar?
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
>
>
> From: Mike
> Sent: Thursday, February 07, 2013 4:49 PM
> To: DrakeRadio@yahoogroups.com
> Cc: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] New question....
>
>
>
> Dan
>
> Would you like me to send you a pair of shorter caps?
>
> They're about an half an inch maybe shorter but rated at the original
> value of 120 mfd.
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> I have some 1/4 inch standoff I can send if that would help.
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> Here a hint if you mounted the pcb on the end cap. Mount the standoffs
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> of the end cap as high as possible.

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> Like I said I've sold over a thousand of these kits. 90% of the problems
> can be traced to wiring issues. Drake simply didn't use he same color if
> wire or even the way the supply had been wire.
>
> Your problem with fitment is the first one had I heard about.
>
> Bottom line is simple.
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> I want you to be happy with my product
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> Mike wb8vge. The heathkitshop.
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> Sent from my iPhone
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>> Mike,
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>> measure the length of the standoffs, and add that to the size of the
>> assembled board. It is MORE THAN 3/16" too long.
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>> the transformer manufacturer, are not consistent, I am simply going to
>> try a different option on the next two AC-4's that I need to do. Not your
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>> fit all. There are always exceptions. It's not your design. It's simply a
>> matter of difference in the product it is designed to go in.
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>> Dan
>>
>> That government is best, which governs the least, because its people
>> discipline themselves. Thomas Jefferson
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>> Sent from my somewhat brighter, larger, electronic leash.
>>
>> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
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>> > Dan,
>> >

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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11831. Re: AC-4, For sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:52:28 UTC
From: Dan Galligan
Topic: 11831 Message: 11831

I believe that if one used good, dense foam, to pack it in, an AC-4, will fit in a USPS Priority Mail Large Flat Rate Box. That is a bit over $16.00 to ship, plus insurance.
I have found (told by another member here) that using those long round, colorful, dense foam tube, swimming pool toys, that can be had for a couple of bucks at discount retailers, and pool supply places, make wonderful packing material. And those flat rate boxes are the best, for shipping heavy, smaller items.

73,
Dan
W3RXO/W6
Pomona,CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

11832. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 02:10:53 UTC
From: WD8ARZ
Topic: 11809 Message: 11832

Is it possible that when the transformer was baked the varnish sealed
the screws too? Either when new, or if it had some vibration, maybe some
other owner before you?

If so, heating it might loosen up the screws enough to remove them
before they cool down.

73 from Bill - WD8ARZ
Proud owner of T-4XC, R-4C, MS-4 with AC-4 inside, and a W4
Now to find an original desk or hand mike ....

On 2/7/2013 9:02 PM, Steve Wedge wrote:
> I'm starting to wonder if this supply had had a different transformer installed. Weren't
a lot of old tube-type TV transformers similar?
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
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>
>
> From: Mike
> Sent: Thursday, February 07, 2013 4:49 PM
> To: DrakeRadio@yahoogroups.com
> Cc: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] New question....
>
>
>
> Dan
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> Would you like me to send you a pair of shorter caps?
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> They're about an half an inch maybe shorter but rated at the original value of 120 mfd.
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> Your problem with fitment is the first one had I heard about.
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> Bottom line is simple.
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> I want you to be happy with my product
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> Mike wb8vge. The heathkitshop.
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> On Feb 7, 2013, at 4:20 PM, Dan Galligan w3rxo@...> wrote:
>
>> Mike,
>> I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
>> I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
>> Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design. It's simply a matter of difference in the product it is designed to go in.
>>
>> Dan
>>
>> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>>
>> Sent from my somewhat brighter, larger, electronic leash.
>>
>> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
>>
>>> Dan,
>>>
>>> I charge $15 to assemble the kit.
>>>
>>> I think that's a fair price for an hour of bench time.
>>>
>>> The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.

>>>
>>> There should not be a fitment problem.
>>>
>>> Mike wb8vge
>>>
>>> Sent from my iPhone
>>>
>>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11833. RE: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:07:56 UTC
From: wayne.smith
Topic: 11825 Message: 11833

Combination rig. My understanding is that the original TR-44 was an R-4A and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not real, others said yes it is. The early versions actually were marked TR-44.

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: Thursday, February 07, 2013 8:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

ok, what is a TR-44C ?

_____
From: Wayne Smith oilieone@... <mailto:oilieone%40cox.net> >
To: "DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> "
DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Thu, February 7, 2013 6:18:01 PM
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

Wow. I have one like it. Maybe I should sell it! The one I acquired was sold as
a TR-44C. And I paid a LOT less!

Wayne
K5FEX

Sent from my iPhone

On Feb 7, 2013, at 7:54 PM, "Steve Wedge" w1es1982@... <mailto:w1es1982%40triad.rr.com> >
wrote:

>http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Late-SN-s-/310583559276?ssPageName=ADME:B:WNA:US:1123
>3
>
> They look nice, but it's with an AC-3. Highest price I've seen for a
>non-Sherwood set! I guess all you really need are two people who REALLY want it.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
>thereto.
>
> [Non-text portions of this message have been removed]
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11834. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:21:52 UTC
From: Dan Galligan
Topic: 11809 Message: 11834

That is entirely plausible. But this one seems more like it is a thick coating of wax, or some black tar like substance, over that. I'll try to upload some photos, to the Yahoo page, and y'all can see what I have here.
My problem is using Photobucket. I use it so little, that I always forget how to log in.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 6:10 PM, WD8ARZ <wd8arz@...> wrote:

> Is it possible that when the transformer was baked the varnish sealed
> the screws too? Either when new, or if it had some vibration, maybe some
> other owner before you?
>
> If so, heating it might loosen up the screws enough to remove them
> before they cool down.
>
> 73 from Bill - WD8ARZ
> Proud owner of T-4XC, R-4C, MS-4 with AC-4 inside, and a W4
> Now to find an original desk or hand mike ....
>
> On 2/7/2013 9:02 PM, Steve Wedge wrote:
>> I'm starting to wonder if this supply had had a different transformer installed. Weren't a lot of old tube-type TV transformers similar?
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>>
>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
>>
>>
>> From: Mike
>> Sent: Thursday, February 07, 2013 4:49 PM
>> To: DrakeRadio@yahoogroups.com
>> Cc: DrakeRadio@yahoogroups.com

>> Subject: Re: [DrakeRadio] New question....
>>
>>
>>
>> Dan
>>
>> Would you like me to send you a pair of shorter caps?
>>
>> They're about an half an inch maybe shorter but rated at the original value of 120 mfd.
>>
>> I have some 1/4 inch standoff I can send if that would help.
>>
>> Here a hint if you mounted the pcb on the end cap. Mount the standoffs first leaving them loose then slip in the pcb.
>>
>> And while I guess it's too late the pcb should be mounted toward the top of the end cap as high as possible.
>>
>> Like I said I've sold over a thousand of these kits. 90% of the problems can be traced to wiring issues. Drake simply didn't use he same color if wire or even the way the supply had been wire.
>>
>> Your problem with fitment is the first one had I heard about.
>>
>> Bottom line is simple.
>>
>> I want you to be happy with my product
>>
>> Mike wb8vge. The heathkitshop.
>>
>> Sent from my iPhone
>>
>> On Feb 7, 2013, at 4:20 PM, Dan Galligan w3rxo@...> wrote:
>>
>>> Mike,
>>> I did one, several years ago, without a hitch. This one, was bought per-assembled by N6DPG. I went to install it last night, and the results have been chronicled here.
>>> I have no doubt that it will work well, but, there is a DEFINITE figment issue. I don't know if that issue is on your end, or that of Drake, or possibly that the transformer was replaced. Any way it goes, it doesn't fit with the standoffs that were supplied. I took out a small ruler, and it is between 3/16" and 1/4" too long at the two caps I mentioned. If you look at the pictures which Joe posted in files, his are shorter, in relationship to the other caps in the picture. Mine are DISTINCTLY longer, and it doesn't fit. I understand that the design is a tight fit, and there requires a bit of finagling, to get it in place. But when I measure the length of the standoffs, and add that to the size of the assembled board. It is MORE THAN 3/16" too long.
>>> Based on the obvious fact that it is a tight fit, and the bolts, used by the transformer manufacturer, are not consistent, I am simply going to try a different option on the next two AC-4's that I need to do. Not your fault. Nothing that is made to be a "One size fits all" actually does, fit all. There are always exceptions. It's not your design.

It's simply a matter of difference in the product it is designed to go in.
>>>
>>> Dan
>>>
>>> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>>>
>>> Sent from my somewhat brighter, larger, electronic leash.
>>>
>>> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
>>>
>>>> Dan,
>>>>
>>>> I charge $15 to assemble the kit.
>>>>
>>>> I think that's a fair price for an hour of bench time.
>>>>
>>>> The 150 mfd caps are the same ones I've used in over a thousand ac4r kits.
>>>>
>>>> There should not be a fitment problem.
>>>>
>>>> Mike wb8vge
>>>>
>>>> Sent from my iPhone
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11835. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:31:40 UTC
From: Don Cunningham
Topic: 11809 Message: 11835

Someone might have put an AC3 transformer in that AC4 along the way. If I remember correctly, the AC3 transformer looked like it had been made, then tar poured over the thing. Possibly Drake had some leftovers and used them. STRANGE things happen to ham gear over the years.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11836. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:34:53 UTC
From: Dan Galligan
Topic: 11825 Message: 11836

I thought RigReference.com had one, but not. RigPix has what they call a TR-44, here:
http://www.rigpix.com/drake/tr44.htm
And WB4HFN, has this TR-44B
http://www.wb4hfn.com/DRAKE/DrakeEquipmentPictures/Equip_TR44B.htm
But, I find only one reference to a TR-44C, in a google search, from QRZ, here:
http://www.google.com/#sclient=tablet-gws&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673&biv=i%7C0;d%7C56_N-phcolQRXM:

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 7:07 PM, "wayne.smith" <oilieone@...> wrote:

> Combination rig. My understanding is that the original TR-44 was an R-4A and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not real, others said yes it is. The early versions actually were marked TR-44.
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> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
> Sent: Thursday, February 07, 2013 8:33 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
>
>
>
> ok, what is a TR-44C ?
>
> _____

> From: Wayne Smith oilieone@... <mailto:oilieone%40cox.net> >
> To: "DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> "
DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
> Sent: Thu, February 7, 2013 6:18:01 PM
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Wow. I have one like it. Maybe I should sell it! The one I acquired was sold as
> a TR-44C. And I paid a LOT less!
>
> Wayne
> K5FEX
>
> Sent from my iPhone
>
> On Feb 7, 2013, at 7:54 PM, "Steve Wedge" w1es1982@... <mailto:w1es1982%40triad.rr.com> >
wrote:
>
>> http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Late-SN-s-/310
583559276?ssPageName=ADME:B:WNA:US:1123
>> 3
>>
>> They look nice, but it's with an AC-3. Highest price I've seen for a
>> non-Sherwood set! I guess all you really need are two people who REALLY want it.
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>> All my computers have my signature with various pearls of wisdom appended
>> thereto.
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11837. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:42:44 UTC
From: Dan Galligan
Topic: 11809 Message: 11837

Don,
> BTW, I am headed to Oklahoma, next week, to take another load of household goods, and get my tags, on my car, my driver license, and my Oklahoma based LEOSA certification. HR218, requires that as a retiree, I must qualify, according to the standards of the state of my residence. If my residence is OK, then I need to qualify, with my local Sheriff, for my 50 state CCW. That very well may be the issue, on this transformer.
>
> I've forgotten how far off of I40 you are, but, maybe, we could have a chance to meet up, and have some coffee, or tea.
>
> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 7, 2013, at 7:31 PM, Don Cunningham <donc@...> wrote:
>
>> Someone might have put an AC3 transformer in that AC4 along the way. If I remember correctly, the AC3 transformer looked like it had been made, then tar poured over the thing. Possibly Drake had some leftovers and used them. STRANGE things happen to ham gear over the years.
>> 73,
>> Don, WB5HAK
>>
>> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

11838. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 03:50:13 UTC
From: Don Cunningham
Topic: 11809 Message: 11838

Dan,

I am a long way South of I-40, nearly to the Red River, so that's probably not workable for either of us, hi. I have forgotten where you are going to live, but I have a daughter in Tulsa and that may put me closer to you.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11839. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 04:43:48 UTC
From: Dan Galligan
Topic: 11809 Message: 11839

I posted photos on the Yahoo page, showing the standoffs being too long. I don't want anyone to think I was disparaging Mike's work, or craftsmanship. I believe it was the fault of the transformer, being other than standard, and NOT Mike's Heathkit Shop Kit design, but it definitely, does not fit.
Anyone who cares to look, and maybe point out where I may be wrong, is welcome to do so. In the mean time, I'm going to King Bolt, for the shorter standoffs.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
Real Radios Glow in the dark, and have LETHAL voltages!!!
12VDC radios are for sissies!
Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
Collins Radio Association Member #1489
Collins Collector's Association Member #AC10-12552

[Non-text portions of this message have been removed]

11840. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 04:55:23 UTC
From: Richard Knoppow
Topic: 11809 Message: 11840

----- Original Message -----
From: "Don Cunningham" <donc@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 07, 2013 7:31 PM
Subject: Re: [DrakeRadio] New question.... Varnish?

> Someone might have put an AC3 transformer in that AC4
> along the way. If I remember correctly, the AC3
> transformer looked like it had been made, then tar poured
> over the thing. Possibly Drake had some leftovers and
> used them. STRANGE things happen to ham gear over the
> years.
> 73,
> Don, WB5HAK

Some transformers, notably those is much General Radio equipment, appear to have been dipped in a coating which forms a hard layer around the unit. I don't remember ever seeing soft tar-like material on an open frame transformer or choke except where it was an impregnant cooked out by overloading. Tar like material is used as a potting compound in canned transformers and chokes. I don't know exactly what it is but it looks like a mixture of waxes and asphalt. I've seen this stuff leak out of overheated transformers that were supposed to be sealed. Its possible the pressure inside was sufficient to create leaks. The hard coating on the GR transformers probably serves to seal them from moisture pretty effectively without having to seal them in a can.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11841. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 05:08:51 UTC
From: Dan Galligan
Topic: 11809 Message: 11841

Richard,
This one is more like it was dipped in something, to seal it. It is reasonably even, over all surfaces of the transformer, except the tabs to mount the transformer to the case. And, as best we could tell, it was working. Then, one of the badly substituted capacitors, shorted, and immediately blew a fuse. Comparing it to the other AC-4 that I have here, this transformer is physically bigger. I must presume it is either a replacement, or one from a Drake supplier, who was not used often. Too long of a story, but I had posted several pictures, several months ago, when Danny bought the AC-4, and found the faulty repair work.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 8:55 PM, Richard Knoppow <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Don Cunningham" <donc@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, February 07, 2013 7:31 PM
> Subject: Re: [DrakeRadio] New question.... Varnish?
>
>
>> Someone might have put an AC3 transformer in that AC4
>> along the way. If I remember correctly, the AC3
>> transformer looked like it had been made, then tar poured
>> over the thing. Possibly Drake had some leftovers and
>> used them. STRANGE things happen to ham gear over the
>> years.
>> 73,
>> Don, WB5HAK
>
> Some transformers, notably those is much General Radio
> equipment, appear to have been dipped in a coating which
> forms a hard layer around the unit. I don't remember ever
> seeing soft tar-like material on an open frame transformer
> or choke except where it was an impregnant cooked out by
> overloading. Tar like material is used as a potting
> compound in canned transformers and chokes. I don't know
> exactly what it is but it looks like a mixture of waxes and
> asphalt. I've seen this stuff leak out of overheated
> transformers that were supposed to be sealed. Its possible
> the pressure inside was sufficient to create leaks. The

> hard coating on the GR transformers probably serves to seal
> them from moisture pretty effectively without having to seal
> them in a can.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11842. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 05:31:51 UTC
From: Chris Farley
Topic: 11809 Message: 11842

Your transformer looks identical to the one in my (late style, s/n 20051) AC-3. Dimensions are 4 1/2" by (2 1/2" wide core, about 4 1/4" overall) by 3 13/16 tall. Do these dimensions match your transformer?
Just pulled the cover on an AC-4 that needs some work (s/n 43365), and its transformer is about 1/2" wider than that of the AC-3's. 4 1/2" by (2 3/4" core, about 4 3/4" overall) by 3 13/16 tall. Physical construction looks to be the same between both transformers, the later one lacks the black pitch coating.
If someone (Drake or otherwise) did indeed install the slightly smaller AC-3 in your AC-4, it makes no sense why the Heathkit shop board would not physically fit. Will it, instead, NOT fit in my stock AC-4 which has larger iron? This is all assuming the mounting holes are in the same location on all supplies.
Regards,Chris

--- On Thu, 2/7/13, Dan Galligan <w3rxo@...> wrote:

From: Dan Galligan <w3rxo@...>
Subject: Re: [DrakeRadio] New question.... Varnish?
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Date: Thursday, February 7, 2013, 11:08 PM

Richard,

This one is more like it was dipped in something, to seal it. It is reasonably even, over all surfaces of the transformer, except the tabs to mount the transformer to the case. And, as best we could tell, it was working. Then, one of the badly substituted capacitors, shorted, and immediately blew a fuse. Comparing it to the other AC-4 that I have here, this transformer is physically bigger. I must presume it is either a replacement, or one from a Drake supplier, who was not used often. Too long of a story, but I had posted several pictures, several months ago, when Danny bought the AC-4, and found the faulty repair work.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 8:55 PM, Richard Knoppow 1oldlens1@...> wrote:

>

> ----- Original Message -----

> From: "Don Cunningham" donc@...>

> To: DrakeRadio@yahoogroups.com>

> Sent: Thursday, February 07, 2013 7:31 PM

> Subject: Re: [DrakeRadio] New question.... Varnish?

>

>

>> Someone might have put an AC3 transformer in that AC4

>> along the way. If I remember correctly, the AC3

>> transformer looked like it had been made, then tar poured

>> over the thing. Possibly Drake had some leftovers and

>> used them. STRANGE things happen to ham gear over the

>> years.

>> 73,

>> Don, WB5HAK

>

> Some transformers, notably those is much General Radio

> equipment, appear to have been dipped in a coating which

> forms a hard layer around the unit. I don't remember ever

> seeing soft tar-like material on an open frame transformer

> or choke except where it was an impregnant cooked out by

> overloading. Tar like material is used as a potting

> compound in canned transformers and chokes. I don't know

> exactly what it is but it looks like a mixture of waxes and

> asphalt. I've seen this stuff leak out of overheated

> transformers that were supposed to be sealed. Its possible

> the pressure inside was sufficient to create leaks. The

> hard coating on the GR transformers probably serves to seal

> them from moisture pretty effectively without having to seal

> them in a can.

>

>

> --

> Richard Knoppow

> Los Angeles

> WB6KBL

> dickburk@...

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11843. RE: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 06:17:17 UTC
From: Terrell Hamilton
Topic: 11825 Message: 11843

Most of the military comm equipment I saw in the 60's was Collins gear, but I seem to remember... that the TR-44 was developed for certain nameless gov't agencies. The reason escapes me, except that perhaps it would be easier to grab and run if you had to, rather than destroy it, which is easier to put in an ops manual than to do.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Thursday, February 07, 2013 7:35 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

I thought RigReference.com had one, but not. RigPix has what they call a TR-44, here:
http://www.rigpix.com/drake/tr44.htm
And WB4HFN, has this TR-44B
http://www.wb4hfn.com/DRAKE/DrakeEquipmentPictures/Equip_TR44B.htm
But, I find only one reference to a TR-44C, in a google search, from QRZ, here:
http://www.google.com/#sclient=tablet-gws
<http://www.google.com/#sclient=tablet-gws&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673>
&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673&biv=i%7C0;d%7C56_N-phcolQRXM:

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 7:07 PM, "wayne.smith" oilieone@...
<mailto:oilieone%40cox.net> > wrote:

> Combination rig. My understanding is that the original TR-44 was an R-4A
and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not
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> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On Behalf Of William Houghton
> Sent: Thursday, February 07, 2013 8:33 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
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> From: Wayne Smith oilieone@... <mailto:oilieone%40cox.net> >
> To: "DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> "
DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
> Sent: Thu, February 7, 2013 6:18:01 PM
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
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> Wow. I have one like it. Maybe I should sell it! The one I acquired was
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> a TR-44C. And I paid a LOT less!
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> Wayne
> K5FEX
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> Sent from my iPhone
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> On Feb 7, 2013, at 7:54 PM, "Steve Wedge" w1es1982@...
<mailto:w1es1982%40triad.rr.com> > wrote:
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http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Lat
e-SN-s-/310583559276?ssPageName=ADME:B:WNA:US:1123
>> 3
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>> They look nice, but it's with an AC-3. Highest price I've seen for a
>> non-Sherwood set! I guess all you really need are two people who REALLY
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>>
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11844. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 06:44:26 UTC
From: VE3AX/7
Topic: 11825 Message: 11844

OK Guys – time to set the record straight.

The rig sold on the auction site is as described; CA-1 stacking cabinet containing a T-4XC and R-4C – it is not a TR-44C. Prices like that make it tough to hang to my similar set!

However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS "TR-44C" on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre's, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.

I'll try and post pictures in several days – having surgery tomorrow so unable to do so right away.

73

Peter
VE3AX/7

From: Terrell Hamilton
Sent: Thursday, February 07, 2013 10:17 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

Most of the military comm equipment I saw in the 60's was Collins gear, but
I seem to remember... that the TR-44 was developed for certain nameless
gov't agencies. The reason escapes me, except that perhaps it would be
easier to grab and run if you had to, rather than destroy it, which is
easier to put in an ops manual than to do.

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Dan Galligan
Sent: Thursday, February 07, 2013 7:35 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

I thought RigReference.com had one, but not. RigPix has what they call a
TR-44, here:
http://www.rigpix.com/drake/tr44.htm

And WB4HFN, has this TR-44B
http://www.wb4hfn.com/DRAKE/DrakeEquipmentPictures/Equip_TR44B.htm
But, I find only one reference to a TR-44C, in a google search, from QRZ, here:
http://www.google.com/#sclient=tablet-gws
http://www.google.com/#sclient=tablet-gws&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673>
&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673&biv=i%7C0;d%7C56_N-phcolQRXM:

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 7:07 PM, "wayne.smith" mailto:oilieone%40cox.net
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On Behalf Of William Houghton
> Sent: Thursday, February 07, 2013 8:33 PM
> To: mailto:DrakeRadio%40yahoogroups.com
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> From: Wayne Smith mailto:oilieone%40cox.net >
> To: "mailto:DrakeRadio%40yahoogroups.com "
mailto:DrakeRadio%40yahoogroups.com >
> Sent: Thu, February 7, 2013 6:18:01 PM
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> On Feb 7, 2013, at 7:54 PM, "Steve Wedge" mailto:w1es1982%40triad.rr.com
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>> They look nice, but it's with an AC-3. Highest price I've seen for a
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11845. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 06:59:15 UTC
From: DRogers
Topic: 11825 Message: 11845

I saw an original TR-44 when I was in college in San Jose, CA, in the very early '70's. It was the R4 receiver and the T4 "Reciter". The "Reciter" was essentially a T4x minus the vfo and the whole operation was run with the R4 vfo. It was in a stacked cabinet that had slots for each unit, the Reciter above the R4. I thought they were very cool -- I was just getting my license at the time and I believe that it was at Quement Electronics on Bascom Avenue. And, needless to say, I couldn't afford to buy it.

The TR-44B was advertised, but I never saw one. If I remember correctly -- an increasingly infrequent event -- the TR-44B "Reciter" portion stated that it was a "Transmitting Adapter" rather than having the Reciter title.

The only pictures I've ever seen of any TR-44C's appeared to be an R4C and a T4XC in a similar stacked case, but I couldn't see any reason for its existence other than for the compact look and I have always doubted that Drake presented them that way. I.e., I've always assumed they were put together that way later in their lives.

For what it is worth . . . .

David, WA7ZYQ

----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com
Sent: Thursday, February 07, 2013 10:17 PM
Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

Most of the military comm equipment I saw in the 60's was Collins gear, but I seem to remember... that the TR-44 was developed for certain nameless gov't agencies. The reason escapes me, except that perhaps it would be easier to grab and run if you had to, rather than destroy it, which is easier to put in an ops manual than to do.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Thursday, February 07, 2013 7:35 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

I thought RigReference.com had one, but not. RigPix has what they call a TR-44, here:
http://www.rigpix.com/drake/tr44.htm
And WB4HFN, has this TR-44B
http://www.wb4hfn.com/DRAKE/DrakeEquipmentPictures/Equip_TR44B.htm

But, I find only one reference to a TR-44C, in a google search, from QRZ, here:
http://www.google.com/#sclient=tablet-gws
http://www.google.com/#sclient=tablet-gws&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673>
&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673&biv=i%7C0;d%7C56_N-phcolQRXM:

73,
Dan
W3RXO/W6
Pomona, CA
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That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

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> From: DrakeRadio@yahoogroups.com
[mailto:DrakeRadio@yahoogroups.com]
On Behalf Of William Houghton
> Sent: Thursday, February 07, 2013 8:33 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
>
>
>
> ok, what is a TR-44C ?
>
> _____
> From: Wayne Smith oilieone@... >

> To: "DrakeRadio@yahoogroups.com "
DrakeRadio@yahoogroups.com >
> Sent: Thu, February 7, 2013 6:18:01 PM
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Wow. I have one like it. Maybe I should sell it! The one I acquired was
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> a TR-44C. And I paid a LOT less!
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> K5FEX
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> Sent from my iPhone
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> On Feb 7, 2013, at 7:54 PM, "Steve Wedge" w1es1982@...
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>>
>> They look nice, but it's with an AC-3. Highest price I've seen for a
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11846. Re: [DrakeRadio] ship an AC3-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 13:27:34 UTC
From: Chgypsy@...
Topic: 11846 Message: 11846

w3rxo@... writes:

I believe that if one used good, dense foam, to pack it in, an AC-4, will fit in a USPS Priority Mail Large Flat Rate Box. That is a bit over $16.00 to ship, plus insurance. Dan
Dan and all,

HMMM ...just happened to have one here, and yes it would fit. You would need a fair amount of packing, and I would have to remove the feet from my particular unit.
Carl wd8nhk

[Non-text portions of this message have been removed]

11847. Re: [DrakeRadio] Transformer ID item

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 13:33:49 UTC
From: Chgypsy@...
Topic: 11847 Message: 11847

w1es1982@... writes:

I'm starting to wonder if this supply had a different transformer
installed. Weren't a lot of old tube-type TV transformers similar? Steve Wedge,
W1ES/4
Most old tv transformers that I remember had full metal covering.....

However the one in mine is paint labeled Cin-tran & #'s and I am thinking
the last Drake source was named something that fit that nomenclature.
Maybe others can verify. I have had four PS's and cannot remember that
printing on the rest. Carl wd8nhk

[Non-text portions of this message have been removed]

11848. Re: [DrakeRadio] Drake rig ID

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 13:40:40 UTC
From: Chgypsy@...
Topic: 11848 Message: 11848

oilieone@... (mailto:oilieone@...) writes:

Combination rig. My understanding is that the original TR-44 was an R-4A
and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not
real, others said yes it is. The early versions actually were marked TR-44.
Miss the online Drake musium for this type of question. Sindre Torp
(LA6OP) is building anew but it takes time. _www.drakemusium.com_
(http://www.drakemusium.com)
Carl WD8NHK

[Non-text portions of this message have been removed]

11849. Re: [DrakeRadio] Drake rig ID

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:18:13 UTC
From: Barry
Topic: 11848 Message: 11849

http://www.drakemuseum.com/

FWIW, the chart in the middle of the page lists a TR-44C.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: Chgypsy@...
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, February 8, 2013 7:40:40 AM
> Subject: Re: [DrakeRadio] Drake rig ID
>
>
>
> _oilieone@..._ (mailto:oilieone@...) writes:
>
> Combination rig. My understanding is that the original TR-44 was an
> R-4A
> and a T-4 exciter in one cabinet. I've had some tell me the TR-44C
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> real, others said yes it is. The early versions actually were
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> Miss the online Drake musium for this type of question. Sindre Torp
> (LA6OP) is building anew but it takes time. _www.drakemusium.com_
> (http://www.drakemusium.com)
> Carl WD8NHK

11850. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:18:29 UTC
From: Steve Wedge
Topic: 11825 Message: 11850

Yes, the TR-44 is a rare bird, indeed. Always hope to find one at a yard sale

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: wayne.smith
Sent: Thursday, February 07, 2013 10:07 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

Combination rig. My understanding is that the original TR-44 was an R-4A and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not real, others said yes it is. The early versions actually were marked TR-44.

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: Thursday, February 07, 2013 8:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

ok, what is a TR-44C ?

From: Wayne Smith oilieone@... >
To: "DrakeRadio@yahoogroups.com " DrakeRadio@yahoogroups.com >
Sent: Thu, February 7, 2013 6:18:01 PM
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

Wow. I have one like it. Maybe I should sell it! The one I acquired was sold as
a TR-44C. And I paid a LOT less!

Wayne
K5FEX

Sent from my iPhone

On Feb 7, 2013, at 7:54 PM, "Steve Wedge" w1es1982@... > wrote:

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> They look nice, but it's with an AC-3. Highest price I've seen for a
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11851. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:20:20 UTC
From: Steve Wedge
Topic: 11783 Message: 11851

OK - I thought I'd scrounged some transformers that were similar in size and had multiple windings. The 700V supply actually comes off a 350V winding, so I suspect there could be something else "out there" that could have been pressed into service.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Paul Kraemer
Sent: Thursday, February 07, 2013 9:38 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New question....

Not even close
Sent from someone who grew up with tv from the 50's until they got solid
stated
Paul K0UYA
----- Original Message -----
From: "Steve Wedge" w1es1982@...>
To: DrakeRadio@yahoogroups.com>
Sent: Thursday, February 07, 2013 8:02 PM
Subject: Re: [DrakeRadio] New question....

> I'm starting to wonder if this supply had had a different transformer
> installed. Weren't a lot of old tube-type TV transformers similar?
>
> Steve Wedge, W1ES/4
>
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>
> From: Mike
> Sent: Thursday, February 07, 2013 4:49 PM
> To: DrakeRadio@yahoogroups.com
> Cc: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] New question....
>
>
>

> Dan
>
> Would you like me to send you a pair of shorter caps?
>
> They're about an half an inch maybe shorter but rated at the original
> value of 120 mfd.
>
> I have some 1/4 inch standoff I can send if that would help.
>
> Here a hint if you mounted the pcb on the end cap. Mount the standoffs
> first leaving them loose then slip in the pcb.
>
> And while I guess it's too late the pcb should be mounted toward the top
> of the end cap as high as possible.
>
> Like I said I've sold over a thousand of these kits. 90% of the problems
> can be traced to wiring issues. Drake simply didn't use he same color if
> wire or even the way the supply had been wire.
>
> Your problem with fitment is the first one had I heard about.
>
> Bottom line is simple.
>
> I want you to be happy with my product
>
> Mike wb8vge. The heathkitshop.
>
> Sent from my iPhone
>
> On Feb 7, 2013, at 4:20 PM, Dan Galligan w3rxo@...> wrote:
>
>> Mike,
>> I did one, several years ago, without a hitch. This one, was bought
>> per-assembled by N6DPG. I went to install it last night, and the results
>> have been chronicled here.
>> I have no doubt that it will work well, but, there is a DEFINITE figment
>> issue. I don't know if that issue is on your end, or that of Drake, or
>> possibly that the transformer was replaced. Any way it goes, it doesn't
>> fit with the standoffs that were supplied. I took out a small ruler, and
>> it is between 3/16" and 1/4" too long at the two caps I mentioned. If you
>> look at the pictures which Joe posted in files, his are shorter, in
>> relationship to the other caps in the picture. Mine are DISTINCTLY
>> longer, and it doesn't fit. I understand that the design is a tight fit,
>> and there requires a bit of finagling, to get it in place. But when I
>> measure the length of the standoffs, and add that to the size of the
>> assembled board. It is MORE THAN 3/16" too long.
>> Based on the obvious fact that it is a tight fit, and the bolts, used by
>> the transformer manufacturer, are not consistent, I am simply going to
>> try a different option on the next two AC-4's that I need to do. Not your
>> fault. Nothing that is made to be a "One size fits all" actually does,

>> fit all. There are always exceptions. It's not your design. It's simply a
>> matter of difference in the product it is designed to go in.
>>
>> Dan
>>
>> That government is best, which governs the least, because its people
>> discipline themselves. Thomas Jefferson
>>
>> Sent from my somewhat brighter, larger, electronic leash.
>>
>> On Feb 7, 2013, at 12:47 PM, Mike prosolar@...> wrote:
>>
>> > Dan,
>> >
>> > I charge $15 to assemble the kit.
>> >
>> > I think that's a fair price for an hour of bench time.
>> >
>> > The 150 mfd caps are the same ones I've used in over a thousand ac4r
>> > kits.
>> >
>> > There should not be a fitment problem.
>> >
>> > Mike wb8vge
>> >
>> > Sent from my iPhone
>> >
>> >
>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11852. Re :Drake Comm Stations

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:35:14 UTC
From: VE3AX/7
Topic: 11825 Message: 11852

Dave and all;

You are right about the original “TR-44” though I have never seen one actually labeled as such. Those I have seen (including mine) were just made up from a T-4 Reciter, and an R-4, or maybe later an R-4A, and a CA-1 stacking cabinet. The T-4 Reciter did not have a built in speaker in place of the PTO like the “T-4B” and T-4C Reciters used in the TR-44B and TR-44C Comm Stations. I also do not remember seeing any T-4B’s sold separately with the speaker. There was a T-4C Reciter sold by a W8 at Dayton last year (I was not there) – he had listed it on the Collins reflector along with several Collins pieces prior to the event. He was supposed to send me a pic but never did. That is the only T-4C I have heard of outside the TR-44C Comm Stations. They certainly seem like pretty scarce pieces.

The CA-1 stacking cabinet looks more like the top cabinet of the receiver with bottom part of the cabinet of the transmitter welded to the top. It’s not really a 2 part shelf as it appears. The tx, or reciter, goes on top. In the Comm Stations, Drake modified the T-4B and T-4C Reciters top cabinets to add a multi-position xtal deck on the side for tx frequency that could be switched in from the front panel. the T-4 Reciter does not have this xtal deck, but not sure if the standalone T-4B or T-4C had that or not. Maybe the fellow who purchased the T-4C at Dayton is lurking here and can shed light on whether it has the xtal deck on the side and the front panel speaker...or not. Just curious!

I checked Sindre’s web site last night for pics of the Comm Stations but he does not have that part of the site operational yet.

Off to the hospital...will post some pics next week.

73
Peter
VE3AX/7

From: DRogers
Sent: Thursday, February 07, 2013 10:59 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

I saw an original TR-44 when I was in college in San Jose, CA, in the very early '70's. It was the R4 receiver and the T4 "Reciter". The "Reciter" was essentially a T4x minus the vfo and the whole operation was run with the R4 vfo. It was in a stacked cabinet that had slots for each unit, the Reciter above the R4. I thought they were very cool -- I was just getting my license at the time and I believe that it was at Quement Electronics on Bascom Avenue. And, needless to say, I couldn't afford to buy it.

The TR-44B was advertised, but I never saw one. If I remember correctly -- an increasingly infrequent event -- the TR-44B "Reciter" portion stated that it was a "Transmitting Adapter" rather than having the Reciter title.

The only pictures I've ever seen of any TR-44C's appeared to be an R4C and a T4XC in a similar stacked case, but I couldn't see any reason for its existence other than for the compact look and I have always doubted that Drake presented them that way. I.e., I've always assumed they were put together that way later in their lives.

For what it is worth . . . .

David, WA7ZYQ

----- Original Message -----
From: Terrell Hamilton
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Thursday, February 07, 2013 10:17 PM
Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

Most of the military comm equipment I saw in the 60's was Collins gear, but
I seem to remember... that the TR-44 was developed for certain nameless
gov't agencies. The reason escapes me, except that perhaps it would be
easier to grab and run if you had to, rather than destroy it, which is
easier to put in an ops manual than to do.

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Dan Galligan
Sent: Thursday, February 07, 2013 7:35 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

I thought RigReference.com had one, but not. RigPix has what they call a
TR-44, here:
http://www.rigpix.com/drake/tr44.htm
And WB4HFN, has this TR-44B
http://www.wb4hfn.com/DRAKE/DrakeEquipmentPictures/Equip_TR44B.htm
But, I find only one reference to a TR-44C, in a google search, from QRZ,
here:
http://www.google.com/#sclient=tablet-gws
http://www.google.com/#sclient=tablet-gws&hl=en&tbo=d&q=drake+tr-44c&oq=dra
ke+tr-44c&gs_l=tablet-gws.12..0i10i30.5830.15034.0.17790.14.12.1.1.1.0.386.1
699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tablet-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2
,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=1024&bih=673>
&hl=en&tbo=d&q=drake+tr-44c&oq=drake+tr-44c&gs_l=tablet-gws.12..0i10i30.5830
.15034.0.17790.14.12.1.1.1.0.386.1699.3j8j0j1.12.0.les%3B..0.0...1ac.1.2.tab
let-gws.tZ4Vd4GbXmY&pbx=1&bav=on.2,or.r_gc.r_pw.&fp=246257471b9ba6ae&biw=102
4&bih=673&biv=i%7C0;d%7C56_N-phcolQRXM:

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 7, 2013, at 7:07 PM, "wayne.smith" mailto:oilieone%40cox.net
> wrote:

> Combination rig. My understanding is that the original TR-44 was an R-4A and a T-4 exciter in one cabinet. I've had some tell me the TR-44C is not real, others said yes it is. The early versions actually were marked TR-44.
>
>
>
>
>
>
>
> From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of William Houghton
> Sent: Thursday, February 07, 2013 8:33 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
>
>
>
> ok, what is a TR-44C ?
>
> _____
> From: Wayne Smith mailto:oilieone%40cox.net >
> To: "mailto:DrakeRadio%40yahoogroups.com " mailto:DrakeRadio%40yahoogroups.com >
> Sent: Thu, February 7, 2013 6:18:01 PM
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Wow. I have one like it. Maybe I should sell it! The one I acquired was sold as
> a TR-44C. And I paid a LOT less!
>
> Wayne
> K5FEX
>
> Sent from my iPhone
>
> On Feb 7, 2013, at 7:54 PM, "Steve Wedge" mailto:w1es1982%40triad.rr.com
> wrote:
>
>>

http://www.ebay.com/itm/Drake-C-Line-R-4C-T-4XC-MS-4-PS-Original-Manuals-Late-SN-s-/310583559276?ssPageName=ADME:B:WNA:US:1123
>> 3
>>
>> They look nice, but it's with an AC-3. Highest price I've seen for a
>> non-Sherwood set! I guess all you really need are two people who REALLY
want it.
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>> All my computers have my signature with various pearls of wisdom appended
>> thereto.
>>
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11853. ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 12:20:29 UTC
From: Clive
Topic: 11853 Message: 11853

Hi, I am new to Drake equipment and I would like some advice from the experts on here.

Is this item 370754014787, shown for sale on eBay an actual TR7 noise Blanker. It does not look to me as though it has enough parts do do the job. Apologies to the seller if it is actually what he says.

73 Clive GW0PPO

11854. Re: [DrakeRadio] ship an AC3-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:51:39 UTC
From: Steve Wedge
Topic: 11846 Message: 11854

FWIW, I just sent, to one of our regulars, an AC-3 in a 12 x 6 x 6 box (didn't think to look and see if it was the same size as a flat rate box...) and it arrived "almost" safely. One of the can caps got a bit bent. Just pack it well...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Chgypsy@...
Sent: Friday, February 08, 2013 8:27 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] ship an AC3-4

w3rxo@... writes:

I believe that if one used good, dense foam, to pack it in, an AC-4, will
fit in a USPS Priority Mail Large Flat Rate Box. That is a bit over $16.00
to ship, plus insurance. Dan
Dan and all,

HMMM ...just happened to have one here, and yes it would fit. You would
need a fair amount of packing, and I would have to remove the feet from my
particular unit.
Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11855. Re: [DrakeRadio] ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:52:53 UTC
From: Garey Barrell
Topic: 11853 Message: 11855

Clive -

Welcome to the group!

You are correct, that is NOT a Noise Blanker. That is a bilateral switch that is installed 'inplace
of' a noise blankerwhen no blanker is included.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Clive wrote:
> Hi, I am new to Drake equipment and I would like some advice from the experts on here.
>
> Is this item 370754014787, shown for sale on eBay an actual TR7 noise Blanker. It does not look to me as though it has enough parts do do the job. Apologies to the seller if it is actually what he says.
>
> 73 Clive GW0PPO
>
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> Yahoo! Groups Links
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11856. Re: New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:52:53 UTC
From: Mark Brueggemann
Topic: 11809 Message: 11856

In my experience fixing many things mechanical I've learned that often rather than struggle to remove a stubborn fastener, it is easier to deal with it by tightening it to the point of failure. Bust it clean, remove the debris and start fresh.

Mark K5LXP
Albuquerque, NM

11857. Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:54:46 UTC
From: Mark Brueggemann
Topic: 11857 Message: 11857

I think I know the answer but I am interested to find out what the surface finish of the white panel behind the 2B slide rule glass is.

Mark K5LXP
Albuquerque, NM

11858. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 14:55:39 UTC
From: Garey Barrell
Topic: 11825 Message: 11858

Peter -

I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> OK Guys – time to set the record straight.
>
> The rig sold on the auction site is as described; CA-1 stacking cabinet containing a T-4XC and R-4C – it is not a TR-44C. Prices like that make it tough to hang to my similar set!
>
> However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS “TR-44C” on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre’s, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.
>
> I’ll try and post pictures in several days – having surgery tomorrow so unable to do so right away.
>
> 73
>
> Peter
> VE3AX/7
>
> From: Terrell Hamilton
> Sent: Thursday, February 07, 2013 10:17 PM
> To: DrakeRadio@yahoogroups.com
> Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Most of the military comm equipment I saw in the 60's was Collins gear, but
> I seem to remember... that the TR-44 was developed for certain nameless
> gov't agencies. The reason escapes me, except that perhaps it would be

> easier to grab and run if you had to, rather than destroy it, which is
> easier to put in an ops manual than to do.
>
> Terry K7WLD
>
> Wenatchee, WA
>

11859. Re: [DrakeRadio] New question....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:16:24 UTC
From: Garey Barrell
Topic: 11783 Message: 11859

Steve -

Here are some AC-4 notes that may help.

Your transformer actually 'looks' right. Most Drake transformers were made by a company called
Cin-Tran, and the higher power ones had that epoxy 'dipped' coating. I doubt that this is a 'generic' replacement. Possibly anavailability problemfor the E / I cores?? Drake ran into many 'not
available in production quantities' in the later stages of C-Linemanufacture. Brass dial gears,
6FQ7, ...?

I've been sorta following this thread, and I wonder if the 'VGE board had the wrong capacitors
installed?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> OK - I thought I'd scrounged some transformers that were similar in size and had multiple windings. The 700V supply actually comes off a 350V winding, so I suspect there could be something else "out there" that could have been pressed into service.
>
>

11860. Re: [DrakeRadio] Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:27:08 UTC
From: Garey Barrell
Topic: 11857 Message: 11860

Mark -

I would call it more of a Semi-Gloss. Not shiny, but not 'flat' either.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Brueggemann wrote:
> I think I know the answer but I am interested to find out what the surface finish of the white panel behind the 2B slide rule glass is.
>
>
> Mark K5LXP
> Albuquerque, NM
>

11861. Re: [DrakeRadio] ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:30:18 UTC
From: Joe
Topic: 11853 Message: 11861

My apologies for going off topic for a few lines below,
however.....Clive...Happy to see you here...Great group, lots of 'hands on'
support!!

But...I gotta ask you..

In your radio world communications, are you called 'GWA-POE'? In my
sometimes sick mind, your call just struck me funny! I'm sorry..... ;)

Joe - WA6RKN

----- Original Message -----
From: "Clive" <clivejenner@...>
Subject: [DrakeRadio] ebay sale of TR7 Noise blanker??????

> Hi, I am new to Drake equipment and I would like some advice from the
> experts on here.
>
> Is this item 370754014787, shown for sale on eBay an actual TR7 noise
> Blanker. It does not look to me as though it has enough parts do do the
> job. Apologies to the seller if it is actually what he says.
>
> 73 Clive GW0PPO
>
>
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11862. Re: [DrakeRadio] Noise blanker other ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:30:58 UTC
From: Chgypsy@...
Topic: 11862 Message: 11862

Hi Gary,
You beat me to it on the below item, but I did think of something else based on the ?.

k4oah@... (mailto:k4oah@...) writes:

You are correct, that is NOT a Noise Blanker. That is a bilateral switch that is installed 'inplace
of' a noise blankerwhen no blanker is included. Garey - K4OAH
Considering that probably no one has a NB for a TR5 that they want to dispose of......anyone out there?
Wonder if I couldn't adapt one from a TR7 unit?
Carl wd8nhk

[Non-text portions of this message have been removed]

11863. Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:42:02 UTC
From: Clive Jenner
Topic: 11853 Message: 11863

Hi Gary thanks for that, saved me the embarrassment of buying something of no use to me.

I don't know what to do for the best. I would hope nobody makes the mistake and bids on it!

73 Clive GW0PPO

11864. Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 15:55:14 UTC
From: Paul Kraemer
Topic: 11853 Message: 11864

Just do the decent thing. Contact the seller on the ebay link provided and explain politely that his listing is incorrect and what it really is.
Most sellers are not the ogres that many would like to assume they are
Paul K0UYA
----- Original Message -----
From: "Clive Jenner" <clivejenner@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 08, 2013 9:42 AM
Subject: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????

> Hi Gary thanks for that, saved me the embarrassment of buying something
> of no use to me.
>
> I don't know what to do for the best. I would hope nobody makes the
> mistake and bids on it!
>
> 73 Clive GW0PPO
>
>
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11865. RE: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:00:45 UTC
From: Wayne Smith
Topic: 11825 Message: 11865

Here are front and back photos of the unit I have. When I purchased it, the description was “TR-44C”. Maybe not?

Thanks all.

73

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Friday, February 08, 2013 8:56 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

Peter -

I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

VE3AX/7 wrote:
> OK Guys – time to set the record straight.
>
> The rig sold on the auction site is as described; CA-1 stacking cabinet containing a T-4XC and R-4C – it is not a TR-44C. Prices like that make it tough to hang to my similar set!
>
> However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS “TR-44C” on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre’s, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.
>
> I’ll try and post pictures in several days – having surgery tomorrow so unable to do so right away.

>
> 73
>
> Peter
> VE3AX/7
>
> From: Terrell Hamilton
> Sent: Thursday, February 07, 2013 10:17 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Most of the military comm equipment I saw in the 60's was Collins gear, but
> I seem to remember... that the TR-44 was developed for certain nameless
> gov't agencies. The reason escapes me, except that perhaps it would be
> easier to grab and run if you had to, rather than destroy it, which is
> easier to put in an ops manual than to do.
>
> Terry K7WLD
>
> Wenatchee, WA
>

[Non-text portions of this message have been removed]

11866. Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:01:27 UTC
From: Barry
Topic: 11853 Message: 11866

Reasonable to assume someone bought a NB, took out the "plug" and put it back in the box the NB came in. Box gets sold with an estate. Buyer of the estate sees box, doesn't know what it is, but paperwork says its a NB for a TR7 and, well, you see the rest.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Paul Kraemer" <elespe@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, February 8, 2013 9:55:14 AM
> Subject: Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
>
> Just do the decent thing. Contact the seller on the ebay link
> provided and
> explain politely that his listing is incorrect and what it really is.
> Most sellers are not the ogres that many would like to assume they
> are
> Paul K0UYA
> ----- Original Message -----
> From: "Clive Jenner" <clivejenner@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, February 08, 2013 9:42 AM
> Subject: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
>
>
> > Hi Gary thanks for that, saved me the embarrassment of buying
> > something
> > of no use to me.
> >
> > I don't know what to do for the best. I would hope nobody makes the
> > mistake and bids on it!
> >
> > 73 Clive GW0PPO
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11867. Re: [DrakeRadio] Re: ebay Noise blanker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:03:42 UTC
From: Chgypsy@...
Topic: 11867 Message: 11867

elespe@... writes:

Most sellers are not the ogres that many would like to assume they are
Paul K0UYA

Or as dumb as they want to be....look at the rest of what he has for sale.
Carl wd8nhk

[Non-text portions of this message have been removed]

11868. Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:04:02 UTC
From: Barry
Topic: 11853 Message: 11868

Sorry to have to reply to my own posts, but that should read "it's a NB", not "its a NB". Didn't catch that until I read my own post (which I should do BEFORE hitting "Send").

Barry - N4BUQ

----- Original Message -----
> From: "Barry" <n4buq@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, February 8, 2013 10:01:27 AM
> Subject: Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
>
> Reasonable to assume someone bought a NB, took out the "plug" and put
> it back in the box the NB came in. Box gets sold with an estate.
> Buyer of the estate sees box, doesn't know what it is, but
> paperwork says its a NB for a TR7 and, well, you see the rest.
>
> Thanks,
> Barry - N4BUQ
>
> ----- Original Message -----
> > From: "Paul Kraemer" <elespe@...>
> > To: DrakeRadio@yahoogroups.com
> > Sent: Friday, February 8, 2013 9:55:14 AM
> > Subject: Re: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
> >
> > Just do the decent thing. Contact the seller on the ebay link
> > provided and
> > explain politely that his listing is incorrect and what it really
> > is.
> > Most sellers are not the ogres that many would like to assume they
> > are
> > Paul K0UYA
> > ----- Original Message -----
> > From: "Clive Jenner" <clivejenner@...>
> > To: <DrakeRadio@yahoogroups.com>
> > Sent: Friday, February 08, 2013 9:42 AM
> > Subject: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
> >
> >
> > > Hi Gary thanks for that, saved me the embarrassment of buying
> > > something
> > > of no use to me.
> > >
> > > I don't know what to do for the best. I would hope nobody makes
> > > the

> > > mistake and bids on it!
> > >
> > > 73 Clive GW0PPO
> > >
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> > > Yahoo! Groups Links
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11869. Re: [DrakeRadio] Noise blanker other ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:05:57 UTC
From: Garey Barrell
Topic: 11862 Message: 11869

Carl -

Dunno, never seen one! Generally speaking, all the Drake NBs are a single design, just implemented
with different components. The NB-7 v2 that was used in the R-7 was a little more elaborate,
including a crystal filter, but still the same circuit.

The mechanical stuff would probably what would trip you up, but hard to say without having even a
photo of an NB-5.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chgypsy@... wrote:
> Hi Gary,
> You beat me to it on the below item, but I did think of something else
> based on the ?.
>
> _k4oah@..._ (mailto:k4oah@...) writes:
>
> You are correct, that is NOT a Noise Blanker. That is a bilateral switch
> that is installed 'inplace
> of' a noise blankerwhen no blanker is included. Garey - K4OAH
> Considering that probably no one has a NB for a TR5 that they want to
> dispose of......anyone out there?
> Wonder if I couldn't adapt one from a TR7 unit?
> Carl wd8nhk
>
>
> [Non-text portions of this message have been removed]
>
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> Yahoo! Groups Links
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11870. Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:45:33 UTC
From: Clive
Topic: 11853 Message: 11870

HI Paul, I have just sent a message to the seller. Of course a bit soon to expect a reply. Just in case anyone is interested in a TR7 Noise blanker, beware! The item number is 370754014787 it is possible the seller has but the wrong image on his advert, but it's better to be safe than sorry. I will get back on here with the result of my email to the seller.

73 Clive GW0PPO

--- In DrakeRadio@yahoogroups.com, "Paul Kraemer" wrote:
>
> Just do the decent thing. Contact the seller on the ebay link provided and
> explain politely that his listing is incorrect and what it really is.
> Most sellers are not the ogres that many would like to assume they are
> Paul K0UYA
> ----- Original Message -----
> From: "Clive Jenner"
> To:
> Sent: Friday, February 08, 2013 9:42 AM
> Subject: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
>
>
> > Hi Gary thanks for that, saved me the embarrassment of buying something
> > of no use to me.
> >
> > I don't know what to do for the best. I would hope nobody makes the
> > mistake and bids on it!
> >
> > 73 Clive GW0PPO
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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>

11871. Issue with my TR7 at power-up

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 16:33:24 UTC
From: w9dz
Topic: 11871 Message: 11871

I inherited my dad's TR7 when he passed last April. It has seen little use and has only been powered up a couple times in the last 10 years.

When I initially power it up the displayed frequency on all bands except 7 Mhz and 5 Mhz is 1 Mhz low. After it is on 15 or 20 minutes the frequency is normal and the rig seems to be fine on both xmit and receive.

I have reseated all of the boards but that hasn't helped.

Any ideas?

Thanks.

Allen, W9DZ

11872. Re: [DrakeRadio] Issue with my TR7 at power-up

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 17:28:27 UTC
From: Garey Barrell
Topic: 11871 Message: 11872

Allen -

Can you determine if the receiver is off frequency, or is the counter reading off frequency?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w9dz wrote:
> I inherited my dad's TR7 when he passed last April. It has seen little use and has only been powered up a couple times in the last 10 years.
>
> When I initially power it up the displayed frequency on all bands except 7 Mhz and 5 Mhz is 1 Mhz low. After it is on 15 or 20 minutes the frequency is normal and the rig seems to be fine on both xmit and receive.
>
> I have reseated all of the boards but that hasn't helped.
>
> Any ideas?
>
> Thanks.
>
> Allen, W9DZ
>
>
>
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>
> Yahoo! Groups Links
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11873. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 17:29:40 UTC
From: Fernando
Topic: 11809 Message: 11873

Hello

I have pictures of my AC4R. See here under Drake <http://67.121.147.138>

You want the circuit board trace to face the transformer and the mounted parts

facing the side of the cabinet.

Fernando N2FQ/6
n2fq@...

On Feb 7, 2013, at 8:43 PM, Dan Galligan <w3rxo@...> wrote:

> I posted photos on the Yahoo page, showing the standoffs being too long. I don't want anyone to think I was disparaging Mike's work, or craftsmanship. I believe it was the fault of the transformer, being other than standard, and NOT Mike's Heathkit Shop Kit design, but it definitely, does not fit.
> Anyone who cares to look, and maybe point out where I may be wrong, is welcome to do so. In the mean time, I'm going to King Bolt, for the shorter standoffs.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
> Real Radios Glow in the dark, and have LETHAL voltages!!!
> 12VDC radios are for sissies!
> Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
> Collins Radio Association Member #1489
> Collins Collector's Association Member #AC10-12552
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11874. Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 18:00:05 UTC
From: Mark Brueggemann
Topic: 11857 Message: 11874

Posted by: "Garey Barrell" k4oah@... k4oah

> I would call it more of a Semi-Gloss. Not shiny, but
> not 'flat' either.

Thanks. I would've figured "matte" so as not have too many interior reflections but "semi" is plausible as well. Matching the lustre will add a bit of a challenge using just spraycans but this gives me something to go on.

Mark K5LXP
Albuquerque, NM

11875. Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 18:00:55 UTC
From: Mark Brueggemann
Topic: 11853 Message: 11875

Posted by: "Barry" n4buq@... n4buq

> Reasonable to assume someone bought a NB, took out the
> "plug" and put it back in the box the NB came in.

This is *exactly* how my recently acquired TR-7 arrived. Now all I need is an SL-500 in an SL-500 box...

Mark K5LXP
Albuquerque, NM

11876. Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 18:33:35 UTC
From: VE3UK Bob
Topic: 11825 Message: 11876

I have a TR-44B which is a very cool assembly. I have been a Drake fan since I have been a ham (1977). I have owned almost every type of Drake tube rig made. The only Drake I purchased new was a complete TR7 station...

I recently purchased my TR-44B which the first and only time that I have ever seen this configuration, in true TR-44 form.

It is pretty cool... It is in decent shape, however, I do plan on a full restore in an attempt to bring it back to "mint shape".

I found a TR-44B brochure online that I uploaded to the files section of this group here;

http://f1.grp.yahoofs.com/v1/ID0VUYNjQ5o-sf0Gwm5r46QKe3lLSarz8I5MuQGc3EZ9r5wfQkkXAHArbx5dMVuUsL9lJF36vRN4ap9THZLiu5U5VVnIrJ_a8iZA/TR-44B.jpg

I hope this helps.

73
Bob VE3UK

11877. TR7 - a useful alignment procedure change

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 19:41:26 UTC
From: floydsense
Topic: 11877 Message: 11877

I was working on a special project involving the TR7 Up Converter board and stumbled across something I thought I'd pass along to TR7 owners who work on their own transceivers.

The Up Converter board is buried under the shield beneath the digital readout board and is used on both transmit and receive. I have two boards, one marked 1977 and the other marked 1979. The older board has just two grounding fingers (on the connector edge), while the newer board has a total of 6 grounding fingers along with a very different ground plane on the board.

The Service Manual alignment process has you peak capacitor C418 (on the Up Converter board) for maximum S meter reading of the calibrator signal. I found that on the older board, the peak setting for C418 was different on transmit and receive and while the peak was rather broad on receive, it was much sharper on transmit. After peaking C418 on transmit, I found that I had 20 watts more output on 10 meters than when the the cap was peaked on receive.

So, the next time you run through the alignment, try peaking the cap on transmit instead of receive, particularly if you're unhappy with the maximum power you can achieve on 10 meters. C418 is accessed via a hole in the digital readout board, so is fairly easy to get to.

There's no easy way to tell which version of the Up Converter board you have without taking it out, but on the cards I have, the newer one has no insulation over the signal coax shield while the older card uses the grey covered coax. It also appears that the coax on the new card is a bit larger in diameter than the older card.

73, Floyd - K8AC

11878. Re: [DrakeRadio] Re: Semi Gloss

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 19:43:16 UTC
From: Chgypsy@...
Topic: 11878 Message: 11878

In a message dated 2/8/2013 1:00:08 P.M. Eastern Standard Time,
qrq_cw@... writes:

Matching the lustre will add a bit of a challenge using just spraycans but
this gives me something to go on.

Go satin, Krylon worked well. Carl wd8nhk

[Non-text portions of this message have been removed]

11879. Re: [DrakeRadio] Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 19:48:58 UTC
From: vacuuminded2@...
Topic: 11857 Message: 11879

I would agree with it being between a matte and satin finish. Definitely not a semi-gloss, at least the ones I've had apart.

Wasn't this panel born more of an off-white though? Almost cream colored? Seems a stark white would be much too bright compared to one that has not been repainted.

Chris

Sent from my outdated iPhone wireless thingy

On Feb 8, 2013, at 8:54 AM, Mark Brueggemann <qrq_cw@...> wrote:

>
> I think I know the answer but I am interested to find out what the surface finish of the white panel behind the 2B slide rule glass is.
>
> Mark K5LXP
> Albuquerque, NM
>
>

[Non-text portions of this message have been removed]

11880. Re: [DrakeRadio] Woody KO4BG

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 19:58:46 UTC
From: Chgypsy@...
Topic: 11880 Message: 11880

Hi Woody,
Do you still happen to have the lid off of the TR5 ?
If so do you happen to have an NB5 noise blanker in it?
If so could I con you into taking some decent photos of the NB5 (digital
?) and sending to me.
Carl wd8nhk

[Non-text portions of this message have been removed]

11881. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 20:17:35 UTC
From: Paul Kraemer
Topic: 11857 Message: 11881

I have closely matched the exterior 4 finish by spraying flat black, baking, then buffing with a soft cloth dampened in mineral spirits
If it were my dial I'd try the flat first. You want to minimize reflections and glare
Paul K0UYA
----- Original Message -----
From: "Mark Brueggemann" <qrq_cw@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 08, 2013 12:00 PM
Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Posted by: "Garey Barrell" k4oah@... k4oah

> I would call it more of a Semi-Gloss. Not shiny, but
> not 'flat' either.

Thanks. I would've figured "matte" so as not have too many interior reflections but "semi" is plausible as well. Matching the lustre will add a bit of a challenge using just spraycans but this gives me something to go on.

Mark K5LXP
Albuquerque, NM

Yahoo! Groups Links

11882. Re: [DrakeRadio] TR7 - a useful alignment procedure change

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 20:21:39 UTC
From: Al Parker
Topic: 11877 Message: 11882

Thanks Floyd,
That's gone into my "archives" for future reference.
73,

Al, W8UT
New Bern, NC
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 2/8/2013 2:41 PM, floydsense wrote:
> I was working on a special project involving the TR7 Up Converter board
> and stumbled across something I thought I'd pass along to TR7 owners who
> work on their own transceivers.
>
> The Up Converter board is buried under the shield beneath the digital
> readout board and is used on both transmit and receive. I have two
> boards, one marked 1977 and the other marked 1979. The older board has
> just two grounding fingers (on the connector edge), while the newer
> board has a total of 6 grounding fingers along with a very different
> ground plane on the board.
>
> The Service Manual alignment process has you peak capacitor C418 (on the
> Up Converter board) for maximum S meter reading of the calibrator
> signal. I found that on the older board, the peak setting for C418 was
> different on transmit and receive and while the peak was rather broad on
> receive, it was much sharper on transmit. After peaking C418 on
> transmit, I found that I had 20 watts more output on 10 meters than when
> the the cap was peaked on receive.
>
> So, the next time you run through the alignment, try peaking the cap on
> transmit instead of receive, particularly if you're unhappy with the
> maximum power you can achieve on 10 meters. C418 is accessed via a hole
> in the digital readout board, so is fairly easy to get to.
>
> There's no easy way to tell which version of the Up Converter board you
> have without taking it out, but on the cards I have, the newer one has
> no insulation over the signal coax shield while the older card uses the
> grey covered coax. It also appears that the coax on the new card is a
> bit larger in diameter than the older card.
>
> 73, Floyd - K8AC
>

>

11883. Re: [DrakeRadio] TR7 - a useful alignment procedure change

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 20:45:44 UTC
From: Don Cunningham
Topic: 11877 Message: 11883

Thanks, Floyd. I wish more would share their "finds" such as this!!!
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11884. Re: ebay sale of TR7 Noise blanker??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 21:10:28 UTC
From: Clive
Topic: 11853 Message: 11884

Hi Folks, the seller has not replied to my message yet but he has updated the advert. I hope that his update makes it clear to prospective purchasers as to what he is selling!

73 Clive GW0PPO

--- In DrakeRadio@yahoogroups.com, "Clive" wrote:
>
>
>
> HI Paul, I have just sent a message to the seller. Of course a bit soon to expect a reply. Just in case anyone is interested in a TR7 Noise blanker, beware! The item number is 370754014787 it is possible the seller has but the wrong image on his advert, but it's better to be safe than sorry. I will get back on here with the result of my email to the seller.
>
> 73 Clive GW0PPO
>
> --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" wrote:
> >
> > Just do the decent thing. Contact the seller on the ebay link provided and
> > explain politely that his listing is incorrect and what it really is.
> > Most sellers are not the ogres that many would like to assume they are
> > Paul K0UYA
> > ----- Original Message -----
> > From: "Clive Jenner"
> > To:
> > Sent: Friday, February 08, 2013 9:42 AM
> > Subject: [DrakeRadio] Re: ebay sale of TR7 Noise blanker??????
> >
> >
> > > Hi Gary thanks for that, saved me the embarrassment of buying something
> > > of no use to me.
> > >
> > > I don't know what to do for the best. I would hope nobody makes the
> > > mistake and bids on it!
> > >
> > > 73 Clive GW0PPO
> > >
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> > > Yahoo! Groups Links
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11885. Re: [DrakeRadio] Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 21:25:28 UTC
From: Garey Barrell
Topic: 11857 Message: 11885

I was talking about when they were new.... Satin is probably a good compromise, definitely NOT
flat. Also they were pure white when new, the paint used yellows with age.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

vacuuminded2@... wrote:
> I would agree with it being between a matte and satin finish. Definitely not a semi-gloss, at least the ones I've had apart.
>
> Wasn't this panel born more of an off-white though? Almost cream colored? Seems a stark white would be much too bright compared to one that has not been repainted.
>
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On Feb 8, 2013, at 8:54 AM, Mark Brueggemann <qrq_cw@...> wrote:
>
>> I think I know the answer but I am interested to find out what the surface finish of the white panel behind the 2B slide rule glass is.
>>
>> Mark K5LXP
>> Albuquerque, NM
>>
>>
>

11886. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 21:42:43 UTC
From: Ernie Gray
Topic: 11857 Message: 11886

I had my cabinet of my TR-4C refinished by a powder coating company in satin black and it looks like the original color and sheen

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Paul Kraemer <elespe@...>
To: DrakeRadio@...m
Sent: Friday, February 8, 2013 3:17 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

I have closely matched the exterior 4 finish by spraying flat black, baking, then buffing with a soft cloth dampened in mineral spirits
If it were my dial I'd try the flat first. You want to minimize reflections and glare
Paul K0UYA
----- Original Message -----
From: "Mark Brueggemann" mailto:qrq_cw%40yahoo.com>
To: mailto:DrakeRadio%40yahoogroups.com>
Sent: Friday, February 08, 2013 12:00 PM
Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Posted by: "Garey Barrell" mailto:k4oah%40mindspring.com k4oah

> I would call it more of a Semi-Gloss. Not shiny, but
> not 'flat' either.

Thanks. I would've figured "matte" so as not have too many interior reflections but "semi" is plausible as well. Matching the lustre will add a bit of a challenge using just spraycans but this gives me something to go on.

Mark K5LXP
Albuquerque, NM

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11887. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 22:06:48 UTC
From: Paul Kraemer
Topic: 11857 Message: 11887

Did they replicate the spatter finish
Paul K0UYA
----- Original Message -----
From: "Ernie Gray" <w1mrq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 08, 2013 3:42 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

I had my cabinet of my TR-4C refinished by a powder coating company in satin black and it looks like the original color and sheen

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Paul Kraemer <elespe@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 8, 2013 3:17 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

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Paul K0UYA
----- Original Message -----
From: "Mark Brueggemann" mailto:qrq_cw%40yahoo.com>
To: mailto:DrakeRadio%40yahoogroups.com>
Sent: Friday, February 08, 2013 12:00 PM
Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Posted by: "Garey Barrell" mailto:k4oah%40mindspring.com k4oah

> I would call it more of a Semi-Gloss. Not shiny, but
> not 'flat' either.

Thanks. I would've figured "matte" so as not have too many interior reflections but "semi" is plausible as well. Matching the lustre will add a bit of a challenge using just spraycans but this gives me something to go on.

Mark K5LXP
Albuquerque, NM

Yahoo! Groups Links

[Non-text portions of this message have been removed]

Yahoo! Groups Links

11888. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 22:13:23 UTC
From: Ernie Gray
Topic: 11857 Message: 11888

They tried to but did not really come pout that way, but it does look good thouigh. The different finish resulting from powder coating does have a different texture to it.

On another note, they can do black wrinkle finshes like on WW2 rigs

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Paul Kraemer <elespe@lisco.com>
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 8, 2013 5:06 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Did they replicate the spatter finish
Paul K0UYA
----- Original Message -----
From: "Ernie Gray" mailto:w1mrq%40yahoo.com>
To: mailto:DrakeRadio%40yahoogroups.com>
Sent: Friday, February 08, 2013 3:42 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

I had my cabinet of my TR-4C refinished by a powder coating company in satin black and it looks like the original color and sheen

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: Paul Kraemer mailto:elespe%40lisco.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Friday, February 8, 2013 3:17 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

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If it were my dial I'd try the flat first. You want to minimize reflections and glare
Paul K0UYA
----- Original Message -----
From: "Mark Brueggemann" mailto:qrq_cw%40yahoo.com>

To: mailto:DrakeRadio%40yahoogroups.com>
Sent: Friday, February 08, 2013 12:00 PM
Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Posted by: "Garey Barrell" mailto:k4oah%40mindspring.com k4oah

> I would call it more of a Semi-Gloss. Not shiny, but
> not 'flat' either.

Thanks. I would've figured "matte" so as not have too many interior reflections but "semi" is plausible as well. Matching the lustre will add a bit of a challenge using just spraycans but this gives me something to go on.

Mark K5LXP
Albuquerque, NM

Yahoo! Groups Links

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11889. Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 22:32:30 UTC
From: Mark Brueggemann
Topic: 11857 Message: 11889

--- On Fri, 2/8/13, "Garey Barrell" k4oah@... k4oah wrote:

> Satin is probably a good compromise, definitely NOT
> flat. Also they were pure white when new, the paint
> used yellows with age.

Mine is definitely yellowed, especially when contrasted to the S-meter face. Compounding the problem is the rust and stains from being submerged in a flooded basement (!). You could say this one's a "fixer-upper".

Mark K5LXP
Albuquerque, NM

11890. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 22:36:03 UTC
From: Steve Wedge
Topic: 11857 Message: 11890

I've heard that you can replicate the spatter finish by drilling out a krylon spray nozzle with a 1/16 drill bit, spraying lightly, then finishing off with rust oleum satin.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 8, 2013, at 5:13 PM, Ernie Gray <w1mrq@...> wrote:

> They tried to but did not really come pout that way, but it does look good thouigh. The different finish resulting from powder coating does have a different texture to it.
>
> On another note, they can do black wrinkle finshes like on WW2 rigs
>
> Ernie Gray
> W1MRQ
> PO Box 548
> Weare, NH, 03281
> 603-770-7408
>
> _____
> From: Paul Kraemer elespe@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, February 8, 2013 5:06 PM
> Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte
>
>
> Did they replicate the spatter finish
> Paul K0UYA
> ----- Original Message -----
> From: "Ernie Gray" mailto:w1mrq%40yahoo.com>
> To: mailto:DrakeRadio%40yahoogroups.com>
> Sent: Friday, February 08, 2013 3:42 PM
> Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte
>
> I had my cabinet of my TR-4C refinished by a powder coating company in satin
> black and it looks like the original color and sheen
>
> Ernie Gray
> W1MRQ
> PO Box 548
> Weare, NH, 03281
> 603-770-7408
>
> _____
> From: Paul Kraemer mailto:elespe%40lisco.com>
> To: mailto:DrakeRadio%40yahoogroups.com

> Sent: Friday, February 8, 2013 3:17 PM
> Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte
>
> I have closely matched the exterior 4 finish by spraying flat black, baking,
> then buffing with a soft cloth dampened in mineral spirits
> If it were my dial I'd try the flat first. You want to minimize reflections
> and glare
> Paul K0UYA
> ----- Original Message -----
> From: "Mark Brueggemann" mailto:qrq_cw%40yahoo.com>
> To: mailto:DrakeRadio%40yahoogroups.com>
> Sent: Friday, February 08, 2013 12:00 PM
> Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte
>
> Posted by: "Garey Barrell" mailto:k4oah%40mindspring.com k4oah
>
> > I would call it more of a Semi-Gloss. Not shiny, but
> > not 'flat' either.
>
> Thanks. I would've figured "matte" so as not have too many interior
> reflections but "semi" is plausible as well. Matching the lustre will add a
> bit of a challenge using just spraycans but this gives me something to go
> on.
>
> Mark K5LXP
> Albuquerque, NM
>
> ------------------------------------
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> [Non-text portions of this message have been removed]
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11891. Re: [DrakeRadio] Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 23:50:11 UTC
From: Wes Bolin
Topic: 11857 Message: 11891

Mark
Mine was mostly flat before I repainted it. Had a lot of nicotine stain and it was yellowed....Simple Green did a good job cleaning it and I went
to WalMart and bought a spray can of flat paint...it was not a pure bright white....forget what it was exactly. In bright light the panel looks less
white than the S-meter.
I repainted the cabinet with Krylon spray Satin finish black paint. Looks very good. Cleaned and polished the knobs, and painted the little
arrows silver. Looks very good. Got a new noogie too. And bulbs too.
Wes

From: Mark Brueggemann <qrq_cw@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 8, 2013 8:54 AM
Subject: [DrakeRadio] Gloss, Semi Gloss or Matte

I think I know the answer but I am interested to find out what the surface finish of the white panel behind the 2B slide rule glass is.

Mark K5LXP
Albuquerque, NM

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11892. Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 23:56:30 UTC
From: Paul Kraemer
Topic: 11857 Message: 11892

Yes, that used to work
Nozzles now have that EZ touch fan pattern feature and it is darn near impossible to develop the light touch for spattering. If you drill the hole hardly at all you get glob finish
To do this MN-2000 job it had to match someone's original 4 Line gear and I made test panels of every flat, semi flat, semi gloss, satin finish paint I could find in the numerous auto and diy stores after learning that the old standard Krylon 1613 is NO LONGER AVAILABLE no matter what the Krylon website says about satin 51613 being the same. NOT TRUE. And if you order some on the internet billed as 1613 you will receive 51613 and you can have two more cans of that for free after you complain not what was advertised. So after stripping and re shooting this puppy twice I settled on plain old Kryon flat, practiced my spattering and got a technique for the finish coat I started the spray on adjacent cardboard getting it right and then moving over the cabinet. Then I baked it in a drying oven at 150 F for a couple hours and after colling overnight I started buffing with the paint thinner damp rag. Polished until I said there, that's about right. Put it together, sent pictures for approval and shipped it!
For me---I would have just taken to my friends with the powder coat facility, bead blasted and asked it go the next round of some satin black they do regularly. They also do the nice tight black wrinkle but not regularly and I don't want to pay the setup for one cabinet.
After that I went to Harbor and got a couple HVLP spray guns and said to wife "last time I use $()*&%^#@ spray cans"

Back to the original topic. My 2B dial in it's untouched original finish is definately more flat or mat than satin and more white than yellowed. That's why I would start flat and buff til it suits you. A lot easier to go dull to shiny than other way round.

My 2c worth YMMV
Paul K0UYA
----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 08, 2013 4:36 PM
Subject: Re: [DrakeRadio] Re: Gloss, Semi Gloss or Matte

> I've heard that you can replicate the spatter finish by drilling out a
> krylon spray nozzle with a 1/16 drill bit, spraying lightly, then
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>> Sent: Friday, February 08, 2013 12:00 PM
>> Subject: [DrakeRadio] Re: Gloss, Semi Gloss or Matte
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>> Posted by: "Garey Barrell" mailto:k4oah%40mindspring.com k4oah
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11893. TR-3 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-08 22:37:24 UTC
From: dlangl01
Topic: 11893 Message: 11893

I have a newly acquired TR-3 that is working excellent on all bands but 15m. I am new to old radios. When switching the band switch to 15 nothing works. Could it be a bad crystal?
K0MER, Dale

11894. twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 02:20:17 UTC
From: yash@aol.com
Topic: 11894 Message: 11894

What is the best coax to use for the twins inter connect cables? r4a and t4xc. the low level cables, also the correct lengths.
thanks
dale wt4t

[Non-text portions of this message have been removed]

11895. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 05:22:27 UTC
From: Dan Galligan
Topic: 11809 Message: 11895

Fernando,
You might not have been following the thread, but there was a problem, that prevented me from doing that. The transformer, in my AC-4, is not the standard one. It uses a set of different diameter and pitch machine screws, than the standoffs have. Then, the transformer is of a larger diameter, than the AC-4R is designed for. So it had to be done differently, and I am doing what others have done, when they had similar issues.
Would I rather have done it, the way it was designed? Sure! But, that wasn't an option

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Feb 8, 2013, at 9:29 AM, Fernando <n2fq@...> wrote:

> Hello
>
> I have pictures of my AC4R. See here under Drake <http://67.121.147.138>
>
> You want the circuit board trace to face the transformer and the mounted parts
>
> facing the side of the cabinet.
>
> Fernando N2FQ/6
> n2fq@...
>
>
>
>
> On Feb 7, 2013, at 8:43 PM, Dan Galligan <w3rxo@...> wrote:
>
>> I posted photos on the Yahoo page, showing the standoffs being too long. I don't want anyone to think I was disparaging Mike's work, or craftsmanship. I believe it was the fault of the transformer, being other than standard, and NOT Mike's Heathkit Shop Kit design, but it definitely, does not fit.
>> Anyone who cares to look, and maybe point out where I may be wrong, is welcome to do so. In the mean time, I'm going to King Bolt, for the shorter standoffs.
>>
>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>> Real Radios Glow in the dark, and have LETHAL voltages!!!

>> 12VDC radios are for sissies!
>> Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
>> Collins Radio Association Member #1489
>> Collins Collector's Association Member #AC10-12552
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11896. Re: [DrakeRadio] TR-3 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 06:29:24 UTC
From: vacuuminded2@...
Topic: 11893 Message: 11896

Hi Dale,
If the calibrator can not even been heard, it's a good possibility the xtal has failed, assuming you have worked the bandswitch back and forth several times, and re-seated the crystal to be sure it's not just a contact oxidation issue. If you've tried transmitting on 15 as well, were you able to achieve any drive and a plate dip?
If you don't have another rock handy to try substituting with, you might try temporarily switching positions with one of the 10m or 20m one and see if you can get any sign of life in RX with the calibrator. Don't attempt to transmit when doing this.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Feb 8, 2013, at 4:37 PM, "dlangl01" <k0mer@...> wrote:

> I have a newly acquired TR-3 that is working excellent on all bands but 15m. I am new to old radios. When switching the band switch to 15 nothing works. Could it be a bad crystal?
> K0MER, Dale
>
>

[Non-text portions of this message have been removed]

11897. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 06:45:23 UTC
From: VE3AX/7
Topic: 11825 Message: 11897

Garey:

>> I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??

Correct! Re-reading my post, I see it may have been misleading, though don't see where I said otherwise.

The first reference was to the recent e-auction of a T-4XC/R-4C combo in a CA-1 cabinet – definitely NOT a TR-44(C or any)! Though I quite often see ads listing a setup like that as such.

The TR-44B and the TR-44C have a Drake-printed nameplate on the side that _SAYS_ TR-44B or TR-44C. And their reciters, the T-4B and T-4C are labeled on the front as such. The Reciters in the "B" and the "C" TR-44's have a speaker that looks much like the RV-4 style speaker in place of the PTO/dial and the large xtal deck hatch on their sides.

I do not know if a "true" TR-44 exists as the only ones I have seen consist simply of a plain-jane T-4 Reciter and an R-4 or R-4A receiver in a CA-1 stacking cabinet – no speaker on the front, just plain empty front panel, and no TR-44 moniker. Drake may have sold some with those upgrades – just that _I've_ never seen one. Maybe someone could check an old Allied catalog from maybe 1967 or even earlier. That's where I first learned of the existence of the later TR-44B Comm station.

Drake sold one more Comm station of sorts in the '80's, probably aimed at the marine reserve market, with the R-4245 receiver and TR-4310 transceiver mounted together in a desktop rack cabinet. I've never seen that combo (have the sales brochure though) but I dearly love the TR-4310. I've paired mine with a "homebrew" R-4245 c/w transceive cable – I mounted a new R-4245 front panel on an RR-3, added the ANT switch and swapped the TR-7 knobs for Ratheons - couple of mostly unused buttons don't match up, otherwise looks great! It's tagged as a fake so in case I accidentally grab the HV in one of my amps some day, my wife and kids won't be accused of misrepresentation when they sell it! The TR-4310/R-4245 units were sold separately of course. I do not believe that the combo unit had a special moniker.

LOVE this thread! I have a special fascination for the Drake amateur rigs which morphed into into commercial units.

Peter
VE3AX/7

From: Garey Barrell
Sent: Friday, February 08, 2013 6:55 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

Peter -

I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

VE3AX/7 wrote:
> OK Guys – time to set the record straight.
>
> The rig sold on the auction site is as described; CA-1 stacking cabinet containing a T-4XC and R-4C – it is not a TR-44C. Prices like that make it tough to hang to my similar set!
>
> However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS “TR-44C” on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre’s, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.
>
> I’ll try and post pictures in several days – having surgery tomorrow so unable to do so right away.
>
> 73
>
> Peter
> VE3AX/7
>
> From: Terrell Hamilton
> Sent: Thursday, February 07, 2013 10:17 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Most of the military comm equipment I saw in the 60's was Collins gear, but
> I seem to remember... that the TR-44 was developed for certain nameless
> gov't agencies. The reason escapes me, except that perhaps it would be
> easier to grab and run if you had to, rather than destroy it, which is
> easier to put in an ops manual than to do.
>
> Terry K7WLD
>
> Wenatchee, WA
>

[Non-text portions of this message have been removed]

11898. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 06:56:16 UTC
From: VE3AX/7
Topic: 11825 Message: 11898

Wayne:

per your posted pics on the Yahoo site.....

As you suspect, you do not have a TR-44C, but the R-4C/T-4XC in a CA-1 stacking cabinet.

Still a nice setup! And you can work split!

73

Peter
VE3AX/7

From: Wayne Smith
Sent: Friday, February 08, 2013 8:00 AM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

Here are front and back photos of the unit I have. When I purchased it, the description was “TR-44C”. Maybe not?

Thanks all.

73

Wayne

K5FEX

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Garey Barrell
Sent: Friday, February 08, 2013 8:56 AM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!

Peter -

I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

VE3AX/7 wrote:
> OK Guys – time to set the record straight.
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> However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS “TR-44C” on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre’s, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.
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[Non-text portions of this message have been removed]

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11899. Re: Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 13:44:09 UTC
From: k5fex
Topic: 11825 Message: 11899

I've wondered for a while if it was "real" HI.

Actually the Stack units are not in the shack.... to save space, i stacked the T-4XC and the R-4C I routinely use. The stacked pair gave me the idea. The shack picture shows the T-4XC, R-4C, TR-4C, MN2000, L4B, SPR-4 and C-4. Have some more pieces with no place to put them. Acquired a TC-2 and CC-1 for 2 meters that are boxed. The stacked unit thought to be the elusive TR-44C is actually at my office on a work table. Turn it on occasionly to keep the caps good. Have not tuned it up or used it since there isn't an antenna.

I'll look it over on Monday for the tags described. When purchased, the seller described it as a tR-44C that was originally put together for MARS use. However, when asking the knowledgable ones on this forum about the rig, I became a bit suspect. The crystals in the rig don't really match up with MARS freqs.

Anyway, time for meeting other hams in OKC for Saturday breakfast.

Thanks all for the info!

wayne
K5FEX

--- In DrakeRadio@yahoogroups.com, "VE3AX/7" wrote:
>
> Wayne:
>
> per your posted pics on the Yahoo site.....
>
> As you suspect, you do not have a TR-44C, but the R-4C/T-4XC in a CA-1 stacking cabinet.
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> Still a nice setup! And you can work split!
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> Peter
> VE3AX/7
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> Wayne
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> K5FEX
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>
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >
> > 73
> >
> > Peter
> > VE3AX/7
> >
> > From: Terrell Hamilton
> > Sent: Thursday, February 07, 2013 10:17 PM
> > To: mailto:DrakeRadio%40yahoogroups.com
> > Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!

> >
> >
> > Most of the military comm equipment I saw in the 60's was Collins gear, but
> > I seem to remember... that the TR-44 was developed for certain nameless
> > gov't agencies. The reason escapes me, except that perhaps it would be
> > easier to grab and run if you had to, rather than destroy it, which is
> > easier to put in an ops manual than to do.
> >
> > Terry K7WLD
> >
> > Wenatchee, WA
> >
>
> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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11900. Re: [DrakeRadio] twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 14:35:45 UTC
From: Garey Barrell
Topic: 11894 Message: 11900

Dale -

All original cables were 38" long tip-to-tip.

The INJ, (and CAR OSC in the C-Line, cables used a foam inner dielectric and phono connectors with a
white insulation. This cable measures 60 pF total capacity.

All other cables used the standard for the day clear polyethelene inner dielectric and phenolic
(brown) insulated phono connectors and measure ~100 pF.

Original Drake INJ and CAR OSC Cables = 19 pF/ft = .160" o.d. (foam poly)

RG-62 = 93R = 13.5 pF/ft = 0.240" o.d.
RG-59 = 75R = 14.8 pF/ft = 0.242" o.d.
RG-6 = 75R = 16.2 pF/ft = 0.270" o.d.
RG-174= 50R = 30.8 pF/ft = 0.110" o.d.
Mic Cable (Belden 8410) = Hi-Z = 33 pf/ft = 0.160" o.d. (foam poly)
Mic Cable (Belden 8421) = Hi-Z = 16 pf/ft = 0.180" o.d. (foam poly)
R/S Audio Patch Cable = 28 pF/ft = 0.165" o.d. (poly)

The best choice is the Belden 8421 Audio cable from their "Brilliance" line. It looks just like the
other cables, and is very flexible. The RG-62 is OK, but it is 50% larger and far less flexible.
RG-62 is also prone to shorting if bent over too small a radius, and is susceptible to heat damage
when soldering connectors. The best "feature" of RG-62 is
that it is often FREE, since there have been many miles of it pulled out of old computer networks.
Belden 8421 is available by the foot from ACK Electronics in Atlanta. Other distributors have it as
well, although many require purchase of a full spool. N7IOH, another list member, had some at one
time that he was selling by the foot.

The only pertinent factor is the total capacity. Impedance and "loss" are not important.

Any _reasonably low capacity_ coax will work if the units are cabled together for the adjustment
of the INJ trimmers.

The cable type ONLY affects the LEVEL of the PreMix signal, (5.645 MHz ABOVE the transmit/receive
frequency,) and a small DC control voltage between the two. If the shunt capacity is too high,

insufficient LO level for the first mixer will reduce the sensitivity of the receiver and the output
power of the transmitter.

Some of the "commercial" cable mfrs use RG-59A, but it's a little larger and also prone to shorting
if bent over too tight a radius.

The ANT lead to the receiver is too short to matter, but you want good shield integrity, which
usually eliminates R/S cables.

The best connectors I've found are the Switchcraft 3502 plugs, available from just about anyone,
Digikey, Mouser, Allied, Newark and just about any reputable parts place.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> What is the best coax to use for the twins inter connect cables? r4a and t4xc. the low level cables, also the correct lengths.
> thanks
> dale wt4t
>

11901. Re: [DrakeRadio] Holy Cha-ching, Batman!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 15:04:49 UTC
From: Garey Barrell
Topic: 11825 Message: 11901

Peter -

I wasn't contesting your post, merely making an observation! :-)

I remember theTR-44 as you describe it, with the T-4 'Reciter', (no speaker,) when it came out. We
couldn't think of anything other than mobile, (or portable?,) use, as in the MT-1 / MR-1 or HX-20/
HR-20 pairs from Heath. It shared a manual with the T-4X, both units on the cover, with second
chassis photos and schematic, both with big 'holes' in them! :-) We figured government was involved, and sure enough they went to SE Asia.

I can't remember if the TR-44 had the 'big' side panel, ('pockets' on the bottom edge to fit over
the tabs on the receiver bottom cover, and 'tabs' on the top to mate with the transmitter top
cover.) The receiver cabinet top had the transmitter bottom cover included, i.e., not two cabinets
welded together. The B and C were made that way.

Don't know much about the commercial gear, have my brain overloaded with 4-Line stuff! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Garey:
>
>>> I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??
> Correct! Re-reading my post, I see it may have been misleading, though don’t see where I said otherwise.
>
> The first reference was to the recent e-auction of a T-4XC/R-4C combo in a CA-1 cabinet – definitely NOT a TR-44(C or any)! Though I quite often see ads listing a setup like that as such.
>
> The TR-44B and the TR-44C have a Drake-printed nameplate on the side that _SAYS_ TR-44B or TR-44C. And their reciters, the T-4B and T-4C are labeled on the front as such. The Reciters in the “B” and the “C” TR-44’s have a speaker that looks much like the RV-4 style speaker in place of the PTO/dial and the large xtal deck hatch on their sides.
>
> I do not know if a “true” TR-44 exists as the only ones I have seen consist simply of a

plain-jane T-4 Reciter and an R-4 or R-4A receiver in a CA-1 stacking cabinet – no speaker on the front, just plain empty front panel, and no TR-44 moniker. Drake may have sold some with those upgrades – just that _I've_ never seen one. Maybe someone could check an old Allied catalog from maybe 1967 or even earlier. That's where I first learned of the existence of the later TR-44B Comm station.
>
> Drake sold one more Comm station of sorts in the '80's, probably aimed at the marine reserve market, with the R-4245 receiver and TR-4310 transceiver mounted together in a desktop rack cabinet. I've never seen that combo (have the sales brochure though) but I dearly love the TR-4310. I've paired mine with a "homebrew" R-4245 c/w transceive cable – I mounted a new R-4245 front panel on an RR-3, added the ANT switch and swapped the TR-7 knobs for Ratheons - couple of mostly unused buttons don't match up, otherwise looks great! It's tagged as a fake so in case I accidentally grab the HV in one of my amps some day, my wife and kids won't be accused of misrepresentation when they sell it! The TR-4310/R-4245 units were sold separately of course. I do not believe that the combo unit had a special moniker.
>
> LOVE this thread! I have a special fascination for the Drake amateur rigs which morphed into into commercial units.
>
> Peter
> VE3AX/7
>
>
> From: Garey Barrell
> Sent: Friday, February 08, 2013 6:55 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Holy Cha-ching, Batman!
>
>
> Peter -
>
> I thought the 'real' TR-44(any) all had the T-4(any), NOT the T-4X(any)..??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> VE3AX/7 wrote:
>> OK Guys – time to set the record straight.
>>
>> The rig sold on the auction site is as described; CA-1 stacking cabinet containing a T-4XC and R-4C – it is not a TR-44C. Prices like that make it tough to hang to my similar set!
>>
>> However, there really is a TR-44C, like the much more common TR-44B, but with a T-4C reciter and R-4C receiver in a CA-1 stacking cabinet. The T-4C has an access door on the side for the TX crystal deck and a xtal switch on the front with many more positions than

the T-4XC. The xtals are not used to generate band ranges but actual tx frequencies, much as the VFO does in a T-4XC. A speaker takes the place of the tx VFO and dial. And it SAYS “TR-44C” on the label plate on the side. I know of only three of these seemingly rare Drake pieces – Sindre’s, mine, and another that W8DRZ owned for a while, but was sold some years ago. I am sure there are more out there somewhere. Maybe this thread will bring them out! There were clues with mine that suggested it was originally used as a communication station at an Austrian embassy in Cairo, Egypt.
>>
>> I’ll try and post pictures in several days – having surgery tomorrow so unable to do so right away.
>>
>> 73
>>
>> Peter
>> VE3AX/7
>>
>> From: Terrell Hamilton
>> Sent: Thursday, February 07, 2013 10:17 PM
>> To: mailto:DrakeRadio%40yahoogroups.com
>> Subject: RE: [DrakeRadio] Holy Cha-ching, Batman!
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>> easier to put in an ops manual than to do.
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>> Terry K7WLD
>>
>> Wenatchee, WA
>>

11902. Re: [DrakeRadio] twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 16:29:05 UTC
From: yash@aol.com
Topic: 11894 Message: 11902

Garey
thanks,this time I printed the response so I don't have to ask again.The 8421 seems to be a hard cable to find in a small footage,will keep looking.
thanks
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Feb 9, 2013 9:35 am
Subject: Re: [DrakeRadio] twin inter connects

Dale -

All original cables were 38" long tip-to-tip.

The INJ, (and CAR OSC in the C-Line, cables used a foam inner dielectric and phono connectors with a
white insulation. This cable measures 60 pF total capacity.

All other cables used the standard for the day clear polyethelene inner dielectric and phenolic
(brown) insulated phono connectors and measure ~100 pF.

Original Drake INJ and CAR OSC Cables = 19 pF/ft = .160" o.d. (foam poly)

RG-62 = 93R = 13.5 pF/ft = 0.240" o.d.
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Mic Cable (Belden 8410) = Hi-Z = 33 pf/ft = 0.160" o.d. (foam poly)
Mic Cable (Belden 8421) = Hi-Z = 16 pf/ft = 0.180" o.d. (foam poly)
R/S Audio Patch Cable = 28 pF/ft = 0.165" o.d. (poly)

The best choice is the Belden 8421 Audio cable from their "Brilliance" line. It looks just like the
other cables, and is very flexible. The RG-62 is OK, but it is 50% larger and far less flexible.
RG-62 is also prone to shorting if bent over too small a radius, and is susceptible to heat damage
when soldering connectors. The best "feature" of RG-62 is
that it is often FREE, since there have been many miles of it pulled out of old computer networks.
Belden 8421 is available by the foot from ACK Electronics in Atlanta. Other distributors have it as
well, although many require purchase of a full spool. N7IOH, another list member, had some at one

time that he was selling by the foot.

The only pertinent factor is the total capacity. Impedance and "loss" are not important.

Any _reasonably low capacity_ coax will work if the units are cabled together for the adjustment
of the INJ trimmers.

The cable type ONLY affects the LEVEL of the PreMix signal, (5.645 MHz ABOVE the transmit/receive
frequency,) and a small DC control voltage between the two. If the shunt capacity is too high,
insufficient LO level for the first mixer will reduce the sensitivity of the receiver and the output
power of the transmitter.

Some of the "commercial" cable mfrs use RG-59A, but it's a little larger and also prone to shorting
if bent over too tight a radius.

The ANT lead to the receiver is too short to matter, but you want good shield integrity, which
usually eliminates R/S cables.

The best connectors I've found are the Switchcraft 3502 plugs, available from just about anyone,
Digikey, Mouser, Allied, Newark and just about any reputable parts place.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

yash@... wrote:
> What is the best coax to use for the twins inter connect cables? r4a and t4xc. the low level cables, also the correct lengths.
> thanks
> dale wt4t
>

[Non-text portions of this message have been removed]

11903. Re: [DrakeRadio] New question.... Varnish?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 16:43:03 UTC
From: Fernando
Topic: 11809 Message: 11903

Sorry about that, I was going by what the pictures depicted.

Hope things workout for you.

Fernando N2FQ/6
n2fq@...

On Feb 8, 2013, at 9:22 PM, Dan Galligan <w3rxo@...> wrote:

> Fernando,
> You might not have been following the thread, but there was a problem, that prevented me from doing that. The transformer, in my AC-4, is not the standard one. It uses a set of different diameter and pitch machine screws, than the standoffs have. Then, the transformer is of a larger diameter, than the AC-4R is designed for. So it had to be done differently, and I am doing what others have done, when they had similar issues.
> Would I rather have done it, the way it was designed? Sure! But, that wasn't an option
>
> Dan
>
> That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Feb 8, 2013, at 9:29 AM, Fernando <n2fq@...> wrote:
>
>> Hello
>>
>> I have pictures of my AC4R. See here under Drake <http://67.121.147.138>
>>
>> You want the circuit board trace to face the transformer and the mounted parts
>>
>> facing the side of the cabinet.
>>
>> Fernando N2FQ/6
>> n2fq@...
>>
>>
>>
>>
>> On Feb 7, 2013, at 8:43 PM, Dan Galligan <w3rxo@...> wrote:
>>
>>> I posted photos on the Yahoo page, showing the standoffs being too long. I don't want anyone to think I was disparaging Mike's work, or craftsmanship. I believe it was the fault of the transformer, being other than standard, and NOT Mike's Heathkit Shop Kit design, but it definitely, does not fit.

>>> Anyone who cares to look, and maybe point out where I may be wrong, is welcome to do so. In the mean time, I'm going to King Bolt, for the shorter standoffs.
>>>
>>> 73,
>>> Dan
>>> W3RXO/W6
>>> Pomona, CA
>>> DM14cb
>>> Real Radios Glow in the dark, and have LETHAL voltages!!!
>>> 12VDC radios are for sissies!
>>> Collector/Operator, of Drake, Collins, Hammarlund and Johnson, Tube-Type, Transmitters & Receivers
>>> Collins Radio Association Member #1489
>>> Collins Collector's Association Member #AC10-12552
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11904. Re: [DrakeRadio] twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 16:49:47 UTC
From: Paul Kraemer
Topic: 11894 Message: 11904

Dale
I have an order pending for a spool of that and some RG 400
I can send you whatever length you want after I complete the order process
Paul K0UYA
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, February 09, 2013 10:29 AM
Subject: Re: [DrakeRadio] twin inter connects

> Garey
> thanks,this time I printed the response so I don't have to ask again.The
> 8421 seems to be a hard cable to find in a small footage,will keep
> looking.
> thanks
> dale wt4t
>
>
>
>
> -----Original Message-----
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sat, Feb 9, 2013 9:35 am
> Subject: Re: [DrakeRadio] twin inter connects
>
>
>
>
>
> Dale -
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> All original cables were 38" long tip-to-tip.
>
> The INJ, (and CAR OSC in the C-Line, cables used a foam inner dielectric
> and phono connectors with a
> white insulation. This cable measures 60 pF total capacity.
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> All other cables used the standard for the day clear polyethelene inner
> dielectric and phenolic
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> The best choice is the Belden 8421 Audio cable from their "Brilliance"
> line. It looks just like the
> other cables, and is very flexible. The RG-62 is OK, but it is 50% larger
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> Other distributors have it as
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> time that he was selling by the foot.
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> The cable type ONLY affects the LEVEL of the PreMix signal, (5.645 MHz
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> shield integrity, which
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> The best connectors I've found are the Switchcraft 3502 plugs, available
> from just about anyone,
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> 73, Garey - K4OAH

> Glen Allen, VA
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> Yahoo! Groups Links
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11905. Re: [DrakeRadio] twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 18:17:02 UTC
From: yash@aol.com
Topic: 11894 Message: 11905

Paul
sounds like a plan from this end ,be happy to take 20 feet off your hands. Let me know when you get the cable.
thanks
dale wt4t

-----Original Message-----
From: Paul Kraemer <elespe@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Feb 9, 2013 11:49 am
Subject: Re: [DrakeRadio] twin inter connects

Dale
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I can send you whatever length you want after I complete the order process
Paul K0UYA
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From: yash@...>
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Sent: Saturday, February 09, 2013 10:29 AM
Subject: Re: [DrakeRadio] twin inter connects

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> From: Garey Barrell k4oah@...>
> To: DrakeRadio DrakeRadio@yahoogroups.com>
> Sent: Sat, Feb 9, 2013 9:35 am
> Subject: Re: [DrakeRadio] twin inter connects
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

11906. Re: twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 18:22:27 UTC
From: radiomanL
Topic: 11894 Message: 11906

I used the RG-62 for my halli twins as that was specified in the manual , they work well and I got around the bending problems by using right angle shielded RCA plugs .
had to look for them and finally found some on the mouser site .
don't remember the part number though .

the local computer repair store gave my a large amount of it .

Andrew
kd5pnt

[Non-text portions of this message have been removed]

11907. Re: [DrakeRadio] Re: twin inter connects

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 18:33:37 UTC
From: yash@aol.com
Topic: 11894 Message: 11907

Andrew
Thats also what is spected for the heath twins. I did fine some RG-62 so still have to make up the cables yet.
dale wt4t

-----Original Message-----
From: radiomanL <radiomanl@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Feb 9, 2013 1:22 pm
Subject: [DrakeRadio] Re: twin inter connects

I used the RG-62 for my halli twins as that was specified in the manual , they work well and I got around the bending problems by using right angle shielded RCA plugs .
had to look for them and finally found some on the mouser site .
don't remember the part number though .

the local computer repair store gave my a large amount of it .

Andrew
kd5pnt

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11908. Re: TR-3 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 19:25:05 UTC
From: Dale
Topic: 11893 Message: 11908

I get nothing on 15, no drive or plate dip. I am pretty sure the crystal has failed. Where would one find a replacement crystal for 15m? Are they the same as the TR-4? Thanks for your help.
Dale, K0MER

11909. Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 20:52:51 UTC
From: Mark Pilant
Topic: 11909 Message: 11909

I've finally managed to spend some sorting through some of the more obvious issues with a TR-4 (S/N 29606) I picked up several months back.

Aside from needing a *serious* cleaning, there were three things I found before I could really start diagnosing things:

1) The T/R switch (S4) was shot. I looked around to see if I could transplant the slide and fingers from another switch, but I wasn't able to find a suitable donor. So I just drilled out the rivets and substituted another slide switch.

One thing I discovered was something had broken several of the windings on RFC11. Does anyone know of a suitable replacement? (Or have a replacement from a parts donor.)

2) The original (K1) relay was long gone, and the replacement was only about half connected. So I opted to get the TR-4 relay board from KE9PQ. I also ordered the appropriate relay from Allied, since I was also ordering some other things.

The instructions which came with the board, and I believe is the same instructions Drake used, don't mention adding a resistor in the plate circuit (of V19, VOX) which is mentioned in Garey's description.

This is further complicated by pin 9 of V19 is already in use as an intermediate connection between R114 and the coax to S2. So I'll probably need to find another way to include the resistor (since the relay coil is only rated at 48 VDC).

3) The #12 fuse lamp is also long gone. Even the socket is no longer there. Any suggestions as to a replacement? I'm thinking I might be able to find a bulb with characteristics similar to the #12 bulb, any *maybe* with wire leads. I'm open :-)

73

- Mark N1VQW

11910. RE: [DrakeRadio] Re: TR-3 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 21:00:24 UTC
From: wayne.smith
Topic: 11893 Message: 11910

Contact International Crystal in Oklahoma City. They should have whatever you need. The website is www.icmfg.com

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dale
Sent: Saturday, February 09, 2013 1:25 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: TR-3 problem

I get nothing on 15, no drive or plate dip. I am pretty sure the crystal has failed. Where would one find a replacement crystal for 15m? Are they the same as the TR-4? Thanks for your help.
Dale, K0MER

[Non-text portions of this message have been removed]

11911. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 21:08:26 UTC
From: Mark Pilant
Topic: 11909 Message: 11911

Oops. The relay board was from John (tr7dude) not KE9PQ. (I ordered the L-4B switch "stuff" from KE9PQ.)

Sorry for any confusion.

73

- Mark N1VQW

11912. Re: [DrakeRadio] Re: TR-3 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 22:01:42 UTC
From: William Houghton
Topic: 11893 Message: 11912

Did you try the crystal osc alignment Part C of the alignment instructions in the manual? You connect at VTVM set to DC- to the test point near V1. Then you adjust a coil based on the band. On a working band you should read a negative DC voltage. I suspect with a dead xtal you will read zero volts.

You could test this by looking at 40m (I assume 40m is working on your rig) and seeing what DC voltage you see at the test point. Then remove the 40m xtal and see what you read (of course power down the radio and let the caps discharge before sticking your fingers in there to remove the xtal).

From: wayne.smith <oilieone@cox.net>
To: DrakeRadio@yahoogroups.com
Sent: Sat, February 9, 2013 1:00:19 PM
Subject: RE: [DrakeRadio] Re: TR-3 problem

Contact International Crystal in Oklahoma City. They should have whatever you need. The website is www.icmfg.com

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dale
Sent: Saturday, February 09, 2013 1:25 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: TR-3 problem

I get nothing on 15, no drive or plate dip. I am pretty sure the crystal has failed. Where would one find a replacement crystal for 15m? Are they the same as the TR-4? Thanks for your help.
Dale, K0MER

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11913. TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 22:19:05 UTC
From: kd8ejz
Topic: 11913 Message: 11913

Hi Group,

TR7 early serial number 1375 -No receive..

Powers up, receiver noise, calibrator signal heard, no change to noise when antenna connected, and no signals heard on any band, not even weak ones.
Everything else appears OK, VFO, display, and all other controls.

The TX/RX relay seems to operating OK and contacts look clean.

Any ideas what might be the problem?

No experoence on TR7's so hoping there might be a well knwn fix.

Thanks for all assistance!

Steve

W8SAW

11914. Where on the PBT reference board to check frequency output of 40 mhz,13.695 VX0

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 23:33:47 UTC
From: ka8asn
Topic: 11914 Message: 11914

For TR7 PBT/Reference Board
I have a guestion on where to obtain a test points to check the frequency of the 40 meter oscillator,the 13.695 VCXO adjustment and the 8.5 MHZ oscillator on the TR7 PBT reference board. The manual says use pin number 21 and adjust L1006 for max 40 MHZ output. For 13.695 MHZ adjustment the manual says use pin 17 and adjust L1005 for exactly 53.695 MHZ.For the 8.05 MHZ the manual says use pin 40 of the PBT board and adjust C1030 for exactly 5.645 MHZ. My question is this!
By not using the board extenders as the manual suggest where can I find the test points?

Thank you in advance

Any suggestions would be appreciated!

Michael J Trussell KA8ASN

11915. Re: [DrakeRadio] TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 23:36:42 UTC
From: Jim Shorney
Topic: 11913 Message: 11915

Is this a "new" (to you) TR-7? If is, check with an Ohm meter that you have a short between the center pins of the EXT ANT and EXT RCVR connectors on the back of the rig. There is an internal jumper there that is intended to be cut when the TR-7 is used with an R-7. An easy "fix" is to add an external RCA-RCA coax jumper on the back of the rig.

73

-Jim

NU0C

On Sat, 09 Feb 2013 22:19:05 -0000, kd8ejz wrote:

>Hi Group,
>
>TR7 early serial number 1375 -No receive..
>
>Powers up, receiver noise, calibrator signal heard, no change to noise when antenna connected, and no signals heard on any band, not even weak ones.
>Everything else appears OK, VFO, display, and all other controls.
>
>The TX/RX relay seems to operating OK and contacts look clean.
>
>Any ideas what might be the problem?
>
>No experoence on TR7's so hoping there might be a well knwn fix.
>
>Thanks for all assistance!
>
>Steve
>
>W8SAW
>
>
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11916. Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 23:38:37 UTC
From: floydsense
Topic: 11913 Message: 11916

My first guess: A previous owner removed the internal jumper between the EXT RCVR and External Antenna jacks on the rear panel and you don't have a jumper between those two jacks. Connect one to the other with a short jumper and see what happens. You can hear the calibrator quite well with that jumper missing.

73, Floyd - K8AC
TR7 Owner

--- In DrakeRadio@yahoogroups.com, "kd8ejz" wrote:
>
> Hi Group,
>
> TR7 early serial number 1375 -No receive..
>
> Powers up, receiver noise, calibrator signal heard, no change to noise when antenna connected, and no signals heard on any band, not even weak ones.
> Everything else appears OK, VFO, display, and all other controls.
>
> The TX/RX relay seems to operating OK and contacts look clean.
>
> Any ideas what might be the problem?
>
> No experoence on TR7's so hoping there might be a well knwn fix.
>
> Thanks for all assistance!
>
> Steve
>
> W8SAW
>

11917. Re: Where on the PBT reference board to check frequency output of 40 mhz,13.695 VX0

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-09 23:44:41 UTC
From: floydsense
Topic: 11914 Message: 11917

You don't need extenders - the pins are all accessible on the bottom side of the parent board. The last two rows near the rear have everything you need. Some of the points are labeled on the board near the pins. You never need the extenders for alignment, and it would be a bad idea to use them as some oscillators might shift a bit when removed from their shielded home.

73, K8AC

--- In DrakeRadio@yahoogroups.com, "ka8asn" wrote:
>
> For TR7 PBT/Reference Board
> I have a guestion on where to obtain a test points to check the frequency of the 40 meter oscillator,the 13.695 VCXO adjustment and the 8.5 MHZ oscillator on the TR7 PBT reference board. The manual says use pin number 21 and adjust L1006 for max 40 MHZ output. For 13.695 MHZ adjustment the manual says use pin 17 and adjust L1005 for exactly 53.695 MHZ.For the 8.05 MHZ the manual says use pin 40 of the PBT board and adjust C1030 for exactly 5.645 MHZ. My question is this!
> By not using the board extenders as the manual suggest where can I find the test points?
>
> Thank you in advance
>
> Any suggestions would be appreciated!
>
> Michael J Trussell KA8ASN
>

11918. Re: [DrakeRadio] TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 01:29:46 UTC
From: Don Cunningham
Topic: 11913 Message: 11918

Check the noise blanker board area. If someone "cherry picked" the noise blanker and didn't put the "switching board" in its place, it won't receive. I've not checked one to see if you could hear the calibrator or not, but if you've checked the jumper Jim and Floyd suggested, I'd look. It sure is an easy check.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

11919. Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 02:11:40 UTC
From: kd8ejz
Topic: 11913 Message: 11919

Hi Guys,

Thanks for the idea. There is indeed an internal jumper link there so it must be something else.??

Thanks.

Steve

--- In DrakeRadio@yahoogroups.com, "floydsense" wrote:
>
> My first guess: A previous owner removed the internal jumper between the EXT RCVR and External Antenna jacks on the rear panel and you don't have a jumper between those two jacks. Connect one to the other with a short jumper and see what happens. You can hear the calibrator quite well with that jumper missing.
>
> 73, Floyd - K8AC
> TR7 Owner
>
> --- In DrakeRadio@yahoogroups.com, "kd8ejz" wrote:
> >
> > Hi Group,
> >
> > TR7 early serial number 1375 -No receive..
> >
> > Powers up, receiver noise, calibrator signal heard, no change to noise when antenna connected, and no signals heard on any band, not even weak ones.
> > Everything else appears OK, VFO, display, and all other controls.
> >
> > The TX/RX relay seems to operating OK and contacts look clean.
> >
> > Any ideas what might be the problem?
> >
> > No experoence on TR7's so hoping there might be a well knwn fix.
> >
> > Thanks for all assistance!
> >
> > Steve
> >
> > W8SAW
> >
>

11920. Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 13:40:11 UTC
From: floydsense
Topic: 11913 Message: 11920

--- In DrakeRadio@yahoogroups.com, "kd8ejz" wrote:
>
> Hi Guys,
>
> Thanks for the idea. There is indeed an internal jumper link there so it must be something else.??
>
> Thanks.
>
> Steve

Sounds as if this TR7 is a new one for you? If so, do you know anything about its history - when was it last working? Does it have any output when in transmit mode on CW with the carrier control turned up? There are some circuits that are used in both transmit and receive modes and that may tell you something. Are there filters installed? Are all the boards there? Check the noise blanker situation as someone else mentioned. I'd check to be sure the oscillators are running properly - you'll need a service manual for that. It's always a good idea with a new TR7 to pull each board and clean the pins they plug into with DeOxit or other cleaner. I use a Q-tip for that. You'll need to fashion a board puller out of a wire coat hanger in order to pull the boards. I see that Jim has a photo of one here: http://incolor.inetnebr.com/jshorney/tr7ext.htm .

Also, there are a few inter-board connections that are made with coaxial cable - I'd make sure all those are properly seated.

73, Floyd - K8AC

11921. Re: [DrakeRadio] Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 14:08:49 UTC
From: Jim Shorney
Topic: 11913 Message: 11921

On Sun, 10 Feb 2013 13:40:11 -0000, floydsense wrote:

> You'll need to fashion a board puller out of a wire coat hanger in order to pull the boards. I see that Jim has a photo of one here:
http://incolor.inetnebr.com/jshorney/tr7ext.htm .

There are instructions for how to make one here:

http://members.ziggo.nl/cmulder/drake.htm#bookmark9

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11922. Re: [DrakeRadio] Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 14:44:58 UTC
From: Chgypsy@...
Topic: 11913 Message: 11922

In a message dated 2/9/2013 9:11:43 P.M. Eastern Standard Time,
eurocarsdirect@... writes:

Thanks for the idea. There is indeed an internal jumper link there so it
must be something else.??
Steve
Hi Steve, The jumper took a tool (which is now in my memory bank
(computer))
The first thing I normally do is to exercise all of the push buttons and
make sure their final position is out. At that point I am down to pulling
the cover and exercising the boards, which I am sure you have read about
(with or without deoxit).

Other
No audio I get into about every two years and its the last board at the
rear, should you have the small coax inserted insufficiently you would get
that too as I remember. Carl wd8nhk

[Non-text portions of this message have been removed]

11923. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 16:12:43 UTC
From: Garey Barrell
Topic: 11909 Message: 11923

Mark -

Progress!

1. Don't forget there is very little clearance for screw heads when the cover is replaced! I show RFC11 as 750 uHy, 500 mA. It should be an 'air' core, not ferrite. It's there to keep
RF off of the RCVR MUTE connection. Same partas RFC2, 3, 4, 6, 7, 9 and 10, so shouldn't be too hard
to find a donor!

2. The resistor is NOT mentioned in those directions, which came from Drake. However, when the P&B
relay was used to replace the Varley in the later C-Line, because of the Varley's high failure rate,
the 1.5k resistor was added. Unfortunately, Drake already used Pin 9 of V19 for a tie pointin the
TR-4. Simplest is probably a resistor soldered to Pin 1 with the wire soldered to its other end,
with a little piece of shrink tubing over it for reinforcement. The shrink is probably overkill
unless you plan mobile operations.!

3. The #47 bulb is identical electrically, and could be installed with wire leads soldered to the
base. The bulb is there to protect against nearby operationof other high powered transmitters, such
as when you pull up to a stop next to an 18 wheeler running a couple kW on CB! If this is your only
radio, the bulb isn't necessary, but if you operateother transmitters while the TR-4 is still
connected to an antenna, the bulb could save T9's primary.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> I've finally managed to spend some sorting through some of the more
> obvious issues with a TR-4 (S/N 29606) I picked up several months
> back.
>
> Aside from needing a *serious* cleaning, there were three things
> I found before I could really start diagnosing things:

>
> 1) The T/R switch (S4) was shot. I looked around to see if
> I could transplant the slide and fingers from another
> switch, but I wasn't able to find a suitable donor. So I
> just drilled out the rivets and substituted another slide
> switch.
>
> One thing I discovered was something had broken several of
> the windings on RFC11. Does anyone know of a suitable
> replacement? (Or have a replacement from a parts donor.)
>
> 2) The original (K1) relay was long gone, and the replacement
> was only about half connected. So I opted to get the TR-4
> relay board from KE9PQ. I also ordered the appropriate
> relay from Allied, since I was also ordering some other
> things.
>
> The instructions which came with the board, and I believe
> is the same instructions Drake used, don't mention adding
> a resistor in the plate circuit (of V19, VOX) which is
> mentioned in Garey's description.
>
> This is further complicated by pin 9 of V19 is already in
> use as an intermediate connection between R114 and the
> coax to S2. So I'll probably need to find another way to
> include the resistor (since the relay coil is only rated
> at 48 VDC).
>
> 3) The #12 fuse lamp is also long gone. Even the socket is
> no longer there. Any suggestions as to a replacement? I'm
> thinking I might be able to find a bulb with characteristics
> similar to the #12 bulb, any *maybe* with wire leads. I'm
> open :-)
>
> 73
>
> - Mark N1VQW
>

11924. Re: [DrakeRadio] Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 16:51:11 UTC
From: Garey Barrell
Topic: 11913 Message: 11924

I still say my "V" shaped one is easier to control.! Rest your forearm on the radio and rock your
wrist up to pull.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> On Sun, 10 Feb 2013 13:40:11 -0000, floydsense wrote:
>
>> You'll need to fashion a board puller out of a wire coat hanger in order to pull the boards. I see that Jim has a photo of one here:
http://incolor.inetnebr.com/jshorney/tr7ext.htm .
>
> There are instructions for how to make one here:
>
> http://members.ziggo.nl/cmulder/drake.htm#bookmark9
>
>

11925. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 17:24:43 UTC
From: Mark Pilant
Topic: 11909 Message: 11925

Hi Garey.

> I show RFC11 as 750 uHy, 500 mA. It should be an 'air' core, not ferrite.

Thank you for the specs. I'll see what I can dig up. It probably isn't real necessary at the moment as I'll be operating the TR-4 by itself.

I used pan-head screws for the switch, so there isn't too much head to worry about. I'll know for sure when I replace the cover :-)

> The resistor is NOT mentioned in those directions, which came from Drake.

It figures :-) I was thinking about doing what you mentioned: soldering a resistor to the socket and then soldering the wire to the "flying" end.

> The #47 bulb is identical electrically...

I had thought of that, I even have some #47 bulbs kicking around. I did manage to find some other bulbs (#2181 and #2112) which are 6.3 V but rated for 20 mA rather than 15 mA. These have wire leads. I also found a 12 V bulb rated for 8 mA, which might be more appropriate.

I have some multi-position antenna switches, so I'm probably safe. But I'll work out something when I get around to actually placing it into service. Right now, I'm just getting it together enough so I can start to really diagnose it.

BTW, for your amusement... Yesterday I got the new relay board installed and then got hung up with the instructions trying to figure out the numbered connections (from the instructions). It wasn't until after I sent an email to John, and checked the instructions again that I found the diagram. (As I slapped myself on the head :-) The interesting part is I stared right at the diagram because John had written the Newark part number for the relay right below the diagram. D'oh...

Thanks for your help/suggestions.

73

- Mark N1VQW

11926. A questiion about a hard of hearing TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 20:25:55 UTC
From: KG0MN
Topic: 11926 Message: 11926

I was given a sick TR-4 by a local ham that who thought that since I have 3 TR-4 and 4th one was called for. He was attempted to replace the RF gain, volume, power switch on the rig and he said it was receiving relatively well prior to his mishap. He thinks he reversed a wire or two in the course of installing the new switch. Once it was installed the receive is very weak. Tuning the calibrater on he signal move to 20 over S(as it should but the volume is still low even with the volume turned up to 3/4 of maximum. Output seems to be fair, but I think the finals need to be replaced. I am wondering if it might be a problem with something on the AF output board. Any suggestions are welcome.

KG0MN

11927. Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 20:26:33 UTC
From: kd8ejz
Topic: 11913 Message: 11927

Hello Floyd and all who have replied with ideas.

Thanks for the suggestions. I am trying to help an old timer Ham out ...apparently it was last working OK a couple of years ago and has been in the shelf since then.
Next step is to go back and check for all the boards, and clean the contacts and see where that takes .

I'll let you know how we get on.

Thanks all again!

Steve

W8SAW

--- In DrakeRadio@yahoogroups.com, "floydsense" wrote:
>
> --- In DrakeRadio@yahoogroups.com, "kd8ejz" wrote:
> >
> > Hi Guys,
> >
> > Thanks for the idea. There is indeed an internal jumper link there so it must be something else.??
> >
> > Thanks.
> >
> > Steve
>
> Sounds as if this TR7 is a new one for you? If so, do you know anything about its history - when was it last working? Does it have any output when in transmit mode on CW with the carrier control turned up? There are some circuits that are used in both transmit and receive modes and that may tell you something. Are there filters installed? Are all the boards there? Check the noise blanker situation as someone else mentioned. I'd check to be sure the oscillators are running properly - you'll need a service manual for that. It's always a good idea with a new TR7 to pull each board and clean the pins they plug into with DeOxit or other cleaner. I use a Q-tip for that. You'll need to fashion a board puller out of a wire coat hanger in order to pull the boards. I see that Jim has a photo of one here: http://incolor.inetnebr.com/jshorney/tr7ext.htm .
>
> Also, there are a few inter-board connections that are made with coaxial cable - I'd make sure all those are properly seated.
>
> 73, Floyd - K8AC
>

11928. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-10 20:59:30 UTC
From: Mark Pilant
Topic: 11909 Message: 11928

Well, I have a little bit of progress.

After replacing the T/R switch and the relay I applied power. The short story is I don't get any audio from the speaker except a very low level AC hum.

On the plus side, with a 7.2 MHz AM modulated signal applied to the antenna connection, I do see a deflection on the S-meter. The down side is without the signal, the S-meter is at about 90% of full scale. (With a signal applied it goes to the extreme right side of the scale.) So it would seem I am at least getting a signal that far.

So the next step I have is to trace the signal from the antenna through the various stages of the rig. When I get bored with that, I can try signal injection to trace from the speaker back through the audio stages.

At any rate, the TR-4 doesn't seem to be completely dead; which is a plus.

Oh yes, Garey, the pan head screws I used to replace the rivets on the T/R slide switch do cause the bottom cover to stick out a bit, but with the top cover attached I just have to make sure I don't really "crank down" the cover screws at that corner of the chassis.

73

- Mark N1VQW

11929. Re: [DrakeRadio] Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 01:11:27 UTC
From: Jim Shorney
Topic: 11913 Message: 11929

On Sun, 10 Feb 2013 20:26:33 -0000, kd8ejz wrote:

>it was last working OK a couple of years ago and has been in the shelf since then

That is almost certianly dirty contacts somewhere.

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

11930. Re: [DrakeRadio] Re: TR7 Receive Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 01:16:53 UTC
From: Jim Shorney
Topic: 11913 Message: 11930

Well, I like the "U" shaped one because you can grab it with both hands. So
there! :P

73

-Jim
NU0C

On Sun, 10 Feb 2013 11:51:11 -0500, Garey Barrell wrote:

>I still say my "V" shaped one is easier to control.! Rest your forearm on the radio and
rock your
>wrist up to pull.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> On Sun, 10 Feb 2013 13:40:11 -0000, floydsense wrote:
>>
>>> You'll need to fashion a board puller out of a wire coat hanger in order to pull the
boards. I see that Jim has a photo of one here:
http://incolor.inetnebr.com/jshorney/tr7ext.htm .
>>
>> There are instructions for how to make one here:
>>
>> http://members.ziggo.nl/cmulder/drake.htm#bookmark9
>>
>>
>
>

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

11931. Drake Mic for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 02:45:53 UTC
From: nn8b
Topic: 11931 Message: 11931

For Sale, 1 Electrovoice 729SRD with the Drake "D" emblem and Drake plug. It's in good shape, the base has some small paint chips and the mic is in pretty good condition. Will send pics if needed.

$40.00 plus $10.00 shipping. Prefer PayPal, will take Postal Money Order.

73
Don, NN8B

11932. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 03:20:20 UTC
From: Garey Barrell
Topic: 11909 Message: 11932

Mark -

Time to recheck the relay wiring!

First level check.... Note the RCVR CATH bus. Confirm that all points on this bus are at ground
reference with power off and disconnected.

With power on, in receive, touch a screwdriver to the wiper (middle) terminal of the AF GAIN
control, and then touch the blade of the screwdriver with your finger. (Effectively touching the
middle terminal with your finger). Should be a loud buzz from the speaker.

Turn RF GAIN control fully clockwise. S-Meter should read near 0. Turn fully counter clockwise,
and S-Meter should read near full scale.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> Well, I have a little bit of progress.
>
> After replacing the T/R switch and the relay I applied power. The
> short story is I don't get any audio from the speaker except a very
> low level AC hum.
>
> On the plus side, with a 7.2 MHz AM modulated signal applied to the
> antenna connection, I do see a deflection on the S-meter. The down
> side is without the signal, the S-meter is at about 90% of full
> scale. (With a signal applied it goes to the extreme right side of
> the scale.) So it would seem I am at least getting a signal that
> far.
>
> So the next step I have is to trace the signal from the antenna
> through the various stages of the rig. When I get bored with that,
> I can try signal injection to trace from the speaker back through
> the audio stages.
>
> At any rate, the TR-4 doesn't seem to be completely dead; which is
> a plus.
>

> Oh yes, Garey, the pan head screws I used to replace the rivets on
> the T/R slide switch do cause the bottom cover to stick out a bit,
> but with the top cover attached I just have to make sure I don't
> really "crank down" the cover screws at that corner of the chassis.
>
>

11933. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 05:01:27 UTC
From: Fred or Ski
Topic: 11540 Message: 11933

Hello List,

I just thought I would get back to you all, that I ordered a 'Red Noogie' and installed it in my 2B today. It looks and works great. I also ordered a Crystal Calibrator to replace the Heathkit xtal calibrator that I had 'stuffed' in the space in the back of the 2B. It worked but didn't fit well as it was too wide and tall. The old 2B is still a great receiver!

73 guys,

Ski

[Non-text portions of this message have been removed]

11934. Birmingham Fest

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 12:27:37 UTC
From: Rich Arland
Topic: 11934 Message: 11934

Anyone on this list going to the Birmingham hamfest the first week in March?

If so, AND you happen to have an AC-4 PSU and/or a RV-4 VFO, W-4 watt meter, or MN-4 ATU you want to off-load, let's get together.

Vy 73
Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

[Non-text portions of this message have been removed]

11935. Re: [DrakeRadio] Re: TR7 board handles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 13:21:58 UTC
From: Chgypsy@...
Topic: 11935 Message: 11935

Now Now you two !
I have one board that only has one hole so had to make a round finger grip with a three inch leg with a hook. Have to use needle noses on the other end at the same time. So it wouldn't matter which one of yours I used on that board. Nah Nah Nah Nuh Na Na 73's Carl wd8nhk

jshorney@... writes:

Well, I like the "U" shaped one because you can grab it with both hands. So there! :P
73
-Jim
NU0C

Garey Barrell wrote:
>I still say my "V" shaped one is easier to control.! Rest your forearm on the radio and rock your
>wrist up to pull.
>>73, Garey - K4OAH
>Glen Allen, VA

[Non-text portions of this message have been removed]

11936. Re: [DrakeRadio] Re: TR7 board handles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 14:01:08 UTC
From: Keith Evans
Topic: 11935 Message: 11936

Hi
Us old F**ts still have the original Drake Handle which came with the TR7.
I just use one end if the board has only one lifting hole.
I guess the original handles will be collectors items soon.
Its sad the original owners didn't pass them on with the rigs, but I guess its understandable
if the radio came from an Estate Sale.
73
Keith G3VKW

----- Original Message -----
From: Chgypsy@...
To: DrakeRadio@yahoogroups.com
Sent: Monday, February 11, 2013 1:21 PM
Subject: Re: [DrakeRadio] Re: TR7 board handles

Now Now you two !
I have one board that only has one hole so had to make a round finger grip with a three inch leg with a hook. Have to use needle noses on the other end at the same time. So it wouldn't matter which one of yours I used on that board. Nah Nah Nah Nuh Na Na 73's Carl wd8nhk

jshorney@... writes:

Well, I like the "U" shaped one because you can grab it with both hands. So there! :P
73
-Jim
NU0C

Garey Barrell wrote:
>I still say my "V" shaped one is easier to control.! Rest your forearm on the radio and rock your
>wrist up to pull.
>>73, Garey - K4OAH
>Glen Allen, VA

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11937. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 14:54:14 UTC
From: Dick Miller
Topic: 11540 Message: 11937

Ski:
From whom did you order your Xtal calibrator for your Drake 2B? Or was
it a used one? Thank you.
Dick, W7KDL, <kdldick@...>

11938. Re: [DrakeRadio] Drake 2B Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 15:17:36 UTC
From: Garey Barrell
Topic: 11540 Message: 11938

Dick -

<http://www.2bradioparts.com/>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dick Miller wrote:
> Ski:
> From whom did you order your Xtal calibrator for your Drake 2B? Or was
> it a used one? Thank you.
> Dick, W7KDL, <kdldick@...>
>
>

11939. TR-4 output spikes low

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 15:19:30 UTC
From: n4guv
Topic: 11939 Message: 11939

Hello. My low serial number Drake TR-4's output will go low (20 watts) intermittantly. Normal output is 150 watts. I have replaced V-4 and V-6 with known good tubes. Output tubes are less than a year old. All testing is done into a dummy load. Any ideas where to look next?

73, N4GUV

11940. Re: [DrakeRadio] TR-4 output spikes low

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 15:38:44 UTC
From: Garey Barrell
Topic: 11939 Message: 11940

Try subbing V13. Or swapping with V18 if no spare available.

What serial number? There eight (8) versions.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

n4guv wrote:
> Hello. My low serial number Drake TR-4's output will go low (20 watts) intermittantly. Normal output is 150 watts. I have replaced V-4 and V-6 with known good tubes. Output tubes are less than a year old. All testing is done into a dummy load. Any ideas where to look next?
>
> 73, N4GUV
>
>

11941. Re: [DrakeRadio] TR7 - a useful alignment procedure change

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 15:38:45 UTC
From: Chuck Pool
Topic: 11877 Message: 11941

Hi Floyd - K8AC,

Thank you for sharing your work regarding the TR7!

The Up Converter board and C418 information is excellent.
I am putting a copy of your informational email in my TR7
manual pronto.

Again, thank you.

Chuck - AA5WG

From: floydsense <floyd@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 8, 2013 2:41 PM
Subject: [DrakeRadio] TR7 - a useful alignment procedure change

I was working on a special project involving the TR7 Up Converter board and stumbled across something I thought I'd pass along to TR7 owners who work on their own transceivers.

The Up Converter board is buried under the shield beneath the digital readout board and is used on both transmit and receive. I have two boards, one marked 1977 and the other marked 1979. The older board has just two grounding fingers (on the connector edge), while the newer board has a total of 6 grounding fingers along with a very different ground plane on the board.

The Service Manual alignment process has you peak capacitor C418 (on the Up Converter board) for maximum S meter reading of the calibrator signal. I found that on the older board, the peak setting for C418 was different on transmit and receive and while the peak was rather broad on receive, it was much sharper on transmit. After peaking C418 on transmit, I found that I had 20 watts more output on 10 meters than when the the cap was peaked on receive.

So, the next time you run through the alignment, try peaking the cap on transmit instead of receive, particularly if you're unhappy with the maximum power you can achieve on 10 meters. C418 is accessed via a hole in the digital readout board, so is fairly easy to get to.

There's no easy way to tell which version of the Up Converter board you have without taking it out, but on the cards I have, the newer one has no insulation over the signal coax shield while the older card uses the grey covered coax. It also appears that the coax on the new card is a bit larger in diameter than the older card.

73, Floyd - K8AC

[Non-text portions of this message have been removed]

11942. Re: [DrakeRadio] Drake Mic for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 16:23:25 UTC
From: George- K4GM
Topic: 11931 Message: 11942

I'm interested but would like a picture or two.

George K4GM

> nn8b <mailto:nn8b.oh@...>
> Sunday, February 10, 2013 9:45 PM
>
>
> For Sale, 1 Electrovoice 729SRD with the Drake "D" emblem and Drake
> plug. It's in good shape, the base has some small paint chips and the
> mic is in pretty good condition. Will send pics if needed.
>
> $40.00 plus $10.00 shipping. Prefer PayPal, will take Postal Money Order.
>
> 73
> Don, NN8B
>
>

[Non-text portions of this message have been removed]

11943. Do you need your heavy boatanchors moved?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 18:12:23 UTC
From: Dan Galligan
Topic: 11943 Message: 11943

I am moving all of my boatanchors, as well as a load of household goods, to my new home in eastern OK, this coming week, including my Gold Dust Twins. I am pretty well full-up, for the trip east. But, I will have an otherwise empty trailer, coming back to SoCal, the following week.
Does anyone need their heavy, delicate rig, moved, with personal attention, to proper care, that United Parcel Smashers, or other carriers will not give, to your precious gear?
I will be bringing an otherwise empty, 12'Lx6'Wx6'H enclosed cargo trailer, behind my Chevy Tahoe, and would be happy to help someone out, if they help me pay for some of my gas, to come back. No firm price, it depends upon size, weight, and difficulty to move it.
I can pick up, anywhere along the I44/40 corridors, from Joplin or Ft Smith, west, and deliver to anywhere between there and Los Angeles County/SoCal area.
I have no set price, as it will depend on how much work it is to secure it, how much it weighs, and how far it needs to be moved. But, I will be very fair, in my pricing. I can even move smaller stuff, in my car, for less money, too.
If you are in need of moving something that you are buying or selling, and would like it done by someone who understands the desire to preserve your precious equipment, please send me an email. We will work out a very fair deal.
Listmates, will get extra consideration, in price.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash. (iPad)

11944. Re: Drake Mic for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 20:38:50 UTC
From: nn8b
Topic: 11931 Message: 11944

George,

Thanks for your interest but it has been sold.
Wish I had more of them, hi.

73
Don, NN8B

--- In DrakeRadio@yahoogroups.com, George- K4GM wrote:
>
> I'm interested but would like a picture or two.
>
> George K4GM
>
> > nn8b
> > Sunday, February 10, 2013 9:45 PM
> >
> >
> > For Sale, 1 Electrovoice 729SRD with the Drake "D" emblem and Drake
> > plug. It's in good shape, the base has some small paint chips and the
> > mic is in pretty good condition. Will send pics if needed.
> >
> > $40.00 plus $10.00 shipping. Prefer PayPal, will take Postal Money Order.
> >
> > 73
> > Don, NN8B
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

11945. Re: Drake Mic for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 20:40:25 UTC
From: nn8b
Topic: 11931 Message: 11945

The Drake 729SRD mic has been sold.

73
Don, NN8B

--- In DrakeRadio@yahoogroups.com, "nn8b" wrote:
>
>
> For Sale, 1 Electrovoice 729SRD with the Drake "D" emblem and Drake plug. It's in good shape, the base has some small paint chips and the mic is in pretty good condition. Will send pics if needed.
>
> $40.00 plus $10.00 shipping. Prefer PayPal, will take Postal Money Order.
>
> 73
> Don, NN8B
>

11946. Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 21:23:35 UTC
From: Al
Topic: 11767 Message: 11946

How much do you want for 8 of them (including postage)? Let me know if PayPal is ok. That would make it easy, or if you want a check, I can do that.

Thanks,
Al

--- In DrakeRadio@yahoogroups.com, K4GM-George wrote:
>
> I think I could help. Just bought a pouch of 50!
>
> George K4GM
>
>
> On 2/7/2013 10:02 AM, Al Schichler wrote:
> >
> > If anyone has a few extra of the black slotted-type 6-32 screws, i would
> > be interested in buying about 5 of them. I just acquired an R-4A that is
> > missing all the top cabinet screws.
> >
> > Thanks,
> > Al, WA2S
> >
> >
>
>
>
> [Non-text portions of this message have been removed]
>

11947. R4 S meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 22:19:45 UTC
From: Paul Kraemer
Topic: 11947 Message: 11947

Looking for an S meter for an R4
Thanks
Paul K0UYA

11948. Re: [DrakeRadio] R4 S meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 22:33:16 UTC
From: Garey Barrell
Topic: 11947 Message: 11948

Paul -

They're all the same, from the 2-B through the R-4C.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
> Looking for an S meter for an R4
> Thanks
> Paul K0UYA
>
>

11949. Re: [DrakeRadio] R4 S meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 22:36:49 UTC
From: Garey Barrell
Topic: 11947 Message: 11949

Actually including all but the earliest 2-As, which had the curved S-Meter scale.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
> Looking for an S meter for an R4
> Thanks
> Paul K0UYA
>
>

11950. Re: [DrakeRadio] Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 23:39:01 UTC
From: K4GM-George
Topic: 11767 Message: 11950

PayPal is ok. How about $2.50 which includes the stamp ?

On 2/11/2013 4:23 PM, Al wrote:
>
> How much do you want for 8 of them (including postage)? Let me know if
> PayPal is ok. That would make it easy, or if you want a check, I can
> do that.
>
> Thanks,
> Al
>
> --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com>, K4GM-George wrote:
> >
> > I think I could help. Just bought a pouch of 50!
> >
> > George K4GM
> >
> >
> > On 2/7/2013 10:02 AM, Al Schichler wrote:
> > >
> > > If anyone has a few extra of the black slotted-type 6-32 screws, i
> would
> > > be interested in buying about 5 of them. I just acquired an R-4A
> that is
> > > missing all the top cabinet screws.
> > >
> > > Thanks,
> > > Al, WA2S
> > >
> > >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>

[Non-text portions of this message have been removed]

11951. Re: [DrakeRadio] Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-11 23:43:02 UTC
From: Dan Galligan
Topic: 11767 Message: 11951

Just FYI, use a padded envelope, lest your screws will be swallowed up in some machine at the Postal Service. I made the mistake a few years back, of mailing an switch button, for a TS-940SAT, to AF6NI, and wound up having to buy another, as when the flat #10 envelope went through the machines, it tore a hole in the envelope, and was lost forever. The padded envelope costs a bit more, and costs more to mail, but it alerts the USPS to the fact that something NOT FLAT is in the envelope, and it gets handled differently.

Dan Galligan
W3RXO/W6
w3rxo@...
Real radios glow in the dark
Member-Collins Collector's Assoc.
Member-Collins Radio Assoc.
Member-Amplitude Modulation Int'l.
Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

On Feb 11, 2013, at 3:39 PM, K4GM-George wrote:

PayPal is ok. How about $2.50 which includes the stamp ?

On 2/11/2013 4:23 PM, Al wrote:
>
> How much do you want for 8 of them (including postage)? Let me know if
> PayPal is ok. That would make it easy, or if you want a check, I can
> do that.
>
> Thanks,
> Al
>
> --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com>, K4GM-George wrote:
>>
>> I think I could help. Just bought a pouch of 50!
>>
>> George K4GM
>>
>>
>> On 2/7/2013 10:02 AM, Al Schichler wrote:
>>>
>>> If anyone has a few extra of the black slotted-type 6-32 screws, i
> would
>>> be interested in buying about 5 of them. I just acquired an R-4A
> that is
>>> missing all the top cabinet screws.
>>>
>>> Thanks,

>>> Al, WA2S
>>>
>>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
>>
>
>

[Non-text portions of this message have been removed]

Yahoo! Groups Links

11952. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 01:03:41 UTC
From: Mark Pilant
Topic: 11909 Message: 11952

Hi Garey.

> First level check.... Note the RCVR CATH bus. Confirm that all
> points on this bus are at ground reference with power off and
> disconnected.

All at ground. Well, OK, .4 ohms :-)

> With power on, in receive, touch a screwdriver to the wiper (middle)
> terminal of the AF GAIN... Should be a loud buzz from the speaker.

Hum is louder today than yesterday, and no change in sound when I
touch the wiper (pin 7 of V18 if I read the schematic correctly).

> Turn RF GAIN control fully clockwise. S-Meter should read near 0.

Fully clockwise, S-meter reads about 80% of full scale.

> Turn fully counter clockwise, and S-Meter should read near full
> scale.

Fully counter/anti-clockwise, and the S-meter is off the scale. It
is pegged to the right of the meter.

When I have some more time available, start working from each end.
RF from the one end and AF from the other.

73

- Mark N1VQW

11953. Re: [DrakeRadio] R4 S meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 01:41:31 UTC
From: Paul Kraemer
Topic: 11947 Message: 11953

Thanks
I'll widen my search to a Drake S meter.
Paul K0UYA

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, February 11, 2013 4:36 PM
Subject: Re: [DrakeRadio] R4 S meter

> Actually including all but the earliest 2-As, which had the curved S-Meter
> scale.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Paul Kraemer wrote:
>> Looking for an S meter for an R4
>> Thanks
>> Paul K0UYA
>>
>>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

11954. Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 14:45:19 UTC
From: Mark Brueggemann
Topic: 11954 Message: 11954

I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.

Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.

Mark K5LXP
Albuquerque, NM

11955. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 14:51:06 UTC
From: Eddy Swynar
Topic: 11954 Message: 11955

On 2013-02-12, at 9:45 AM, Mark Brueggemann wrote:

>
> I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.

Hi Mark,

Others dispute the technique, but I've very successfully "rubbed" the contacts clean here with little more than a good eraser-end of a lead pencil...

Just be careful to blow away any residual rubber, and do not disturb any of the fixed contacts by hitting them hard with the eraser.

It works very well, & the oxidation comes off with a minimum of effort...

~73~ de Eddy VE3CUI - VE3XZ

It works VERY VERY well---the oxidation comes off with little effort.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

11956. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 14:51:35 UTC
From: Paul Kraemer
Topic: 11954 Message: 11956

I spray a bit of contact cleaner in a cup and then soak Q type tips in the
cleaner to scrub the contacts as I work the switch
The longer wooden handle Q tips reach difficult places
Don't soak the switch with cleaner if you can avoid it.
Works well for me
Paul K0UYA

----- Original Message -----
From: "Mark Brueggemann" <qrq_cw@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, February 12, 2013 8:45 AM
Subject: [DrakeRadio] Grungy Wafer Switches

>
> I don't typically work on boatanchors but when I do, invariably the wafer
> switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering
> if there's something better than spraying with contact cleaner and working
> the switch until the wiper wears a clean groove in the contacts.
>
> Mark K5LXP
> Albuquerque, NM
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

11957. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 15:52:43 UTC
From: Garey Barrell
Topic: 11954 Message: 11957

Mark -

I have an opinion... [SURPRISE!!]

The black or dark brown 'grunge' on silver is silver sulfide. It forms by combining silver with
sulfur compounds in theair, and the rate of growth depends upon air quality. It's softand easily
scraped off by the wiping action of rotary switch wafers, in fact many toggle switches and relays
are also designed with 'wiping' contacts for this reason.

Some advocate cleaning this grunge off with 'silver cleaner', making the switch look like new.
There are several reasons for NOT doing this. One, and perhaps most important, poking around wafer
switches with tools, scrubbing components, is the best way I know of to destroy a switch. All it
takes is a Q-tip to hang on a fixed contact, or some other mishap to 'spring' a fixed contact.
Switches the size of those in 4 Line receivers and transmitters do NOT lend themselves to
replacement of a single contact. Bigger switches make it possible to replace individual contacts
from donor switches, but not the tiny ones we use. Two, silver cleaners work in one of two ways.
Either they have chemicals that dissolve the silver sulfide and allow it to be wiped off, or a mild
abrasive that scrubs it off. Note that the word 'silver' appears here. What this means is that any
type of silver cleaner works by removing SILVER sulfide. The remaining 'cleaner' must also be
removed completely, as most are corrosive. For Grandma's solid silver gravy ladle, this lossof
silver is negligible. The silver PLATING on switch contacts is not very thick, and if you 'remove'
enough, you end up with brass contacts. This leads us to three, silver sulfide is self limiting,
i.e., once the base silver is covered, it stops forming. So when you remove the silver sulfide,
exposing the nice bright silver, the silver sulfide immediately starts forming again. Grandma's
Sterling silver gets pretty grungy from one Christmas to the next Thanksgiving.

A little DeoxIT, a gentle exercising of the switch to dig out that nice, bright strip of silver,
then a little more DeoxIT to protect it from sulfur, works just fine, and the rest of the

contactremains safely covered by silver sulfide.

So... If you want 'pretty' switches to look at (?), silver cleaner is your weapon of choice. If you
want your radio to work for years without further attention to switch continuity, stick with DeoxIT.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Brueggemann wrote:
> I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.
>
> Mark K5LXP
> Albuquerque, NM
>
>

11958. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 16:06:09 UTC
From: Robert Logan
Topic: 11954 Message: 11958

I am a little confused about Deoxit. It seems there are two flavors and each has a slightly different purpose and people use both versions. One is a cleaner and the other is something I forget at the moment. I've looked at their website but need a user explanation.

What are the two different kinds and in what sequence should be applied to switch contacts? Should they both be used or is that overkill.

Would appreciate any advice. Bob, NZ5A

Sent from my iPhone

On Feb 12, 2013, at 9:52 AM, Garey Barrell <k4oah@mindspring.com> wrote:

Mark -

I have an opinion... [SURPRISE!!]

The black or dark brown 'grunge' on silver is silver sulfide. It forms by combining silver with
sulfur compounds in theair, and the rate of growth depends upon air quality. It's softand easily
scraped off by the wiping action of rotary switch wafers, in fact many toggle switches and relays
are also designed with 'wiping' contacts for this reason.

Some advocate cleaning this grunge off with 'silver cleaner', making the switch look like new.
There are several reasons for NOT doing this. One, and perhaps most important, poking around wafer
switches with tools, scrubbing components, is the best way I know of to destroy a switch. All it
takes is a Q-tip to hang on a fixed contact, or some other mishap to 'spring' a fixed contact.
Switches the size of those in 4 Line receivers and transmitters do NOT lend themselves to replacement of a single contact. Bigger switches make it possible to replace individual contacts
from donor switches, but not the tiny ones we use. Two, silver cleaners work in one of two ways.
Either they have chemicals that dissolve the silver sulfide and allow it to be wiped off, or a mild
abrasive that scrubs it off. Note that the word 'silver' appears here. What this means is that any
type of silver cleaner works by removing SILVER sulfide. The remaining 'cleaner' must also be
removed completely, as most are corrosive. For Grandma's solid silver gravy ladle, this lossof
silver is negligible. The silver PLATING on switch contacts is not very thick, and if you

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enough, you end up with brass contacts. This leads us to three, silver sulfide is self limiting,
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So... If you want 'pretty' switches to look at (?), silver cleaner is your weapon of choice. If you
want your radio to work for years without further attention to switch continuity, stick with DeoxIT.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Mark Brueggemann wrote:
> I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.
>
> Mark K5LXP
> Albuquerque, NM
>
>

[Non-text portions of this message have been removed]

11959. RE: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 16:21:06 UTC
From: Stephen Finch
Topic: 11954 Message: 11959

I've used a brand new dollar bill and slid it between the contacts and slide back and forth. This has worked on all but the worst oxidized switches.

Steve

Stephen Finch

AI0W

ARRL Technical Coordinator - North Florida Section

Ai0w@...

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Eddy Swynar
Sent: Tuesday, February 12, 2013 9:51 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

On 2013-02-12, at 9:45 AM, Mark Brueggemann wrote:

>
> I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.

Hi Mark,

Others dispute the technique, but I've very successfully "rubbed" the contacts clean here with little more than a good eraser-end of a lead pencil...

Just be careful to blow away any residual rubber, and do not disturb any of the fixed contacts by hitting them hard with the eraser.

It works very well, & the oxidation comes off with a minimum of effort...

~73~ de Eddy VE3CUI - VE3XZ

It works VERY VERY well---the oxidation comes off with little effort.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11960. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 16:23:20 UTC
From: Joe
Topic: 11954 Message: 11960

THANK-YOU!

I was surprised no one mentioned using DeoxIT until Garey! I use D100 for all my switch cleaning and it also protects and coats the contacts as well. I get the little spray can that meters each 'shot', so wastage and object saturation is a thing of the past!

Joe - WA6RKN

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
Subject: Re: [DrakeRadio] Grungy Wafer Switches

> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
> bright strip of silver,
> then a little more DeoxIT to protect it from sulfur, works just fine, and
> the rest of the
> contactremains safely covered by silver sulfide.
>
> So... If you want 'pretty' switches to look at (?), silver cleaner is your
> weapon of choice. If you
> want your radio to work for years without further attention to switch
> continuity, stick with DeoxIT.

11961. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 16:53:22 UTC
From: Barry
Topic: 11954 Message: 11961

I've heard that DeoxIT can be absorbed by phenolic and, in the case of high-impedance circuits, that can be problematic. I don't know if that applies to the switches under discussion but it is something to think about.

It is supposedly best to apply it precisely and only where needed. While I've never had one, the needle applicator looks like it would work the best on wafer switches.

http://store.caig.com/s.nl/it.A/id.2430/.f

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Joe" <WA6RKN@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 12, 2013 10:23:20 AM
> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
> THANK-YOU!
>
> I was surprised no one mentioned using DeoxIT until Garey! I use
> D100 for
> all my switch cleaning and it also protects and coats the contacts as
> well.
> I get the little spray can that meters each 'shot', so wastage and
> object
> saturation is a thing of the past!
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
>
> > A little DeoxIT, a gentle exercising of the switch to dig out that
> > nice,
> > bright strip of silver,
> > then a little more DeoxIT to protect it from sulfur, works just
> > fine, and
> > the rest of the
> > contactremains safely covered by silver sulfide.
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> > So... If you want 'pretty' switches to look at (?), silver cleaner
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> > weapon of choice. If you

> > want your radio to work for years without further attention to
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> > continuity, stick with DeoxIT.
>
>
>
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> Yahoo! Groups Links
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11962. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 16:57:04 UTC
From: Dan Galligan
Topic: 11954 Message: 11962

I went through this lesson last year, when I did my first two (ever) radio resurrections. One was an R4-C. I tried most of the mentioned methods, and have since come to the conclusion that DeOxIT D100L, with the needle applicator, is the preferred product, for switch contacts. It takes very little, so a small bottle, will last a very long time. Also, I have on hand, DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable resistors, and such. Since those first two radios, I have done a few more, and been much happier with the results of the DeOxIT products, available from Amazon.com.
I hope this information helps.

Dan Galligan
W3RXO/W6
Pomona, CA
DM14cb
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Real radios glow in the dark
Member-Collins Collector's Assoc.
Member-Collins Radio Assoc.
Member-Amplitude Modulation Int'l.
Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

On Feb 12, 2013, at 8:23 AM, Joe wrote:

THANK-YOU!

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all my switch cleaning and it also protects and coats the contacts as well.
I get the little spray can that meters each 'shot', so wastage and object
saturation is a thing of the past!

Joe - WA6RKN

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
Subject: Re: [DrakeRadio] Grungy Wafer Switches

> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
> bright strip of silver,
> then a little more DeoxIT to protect it from sulfur, works just fine, and
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> So... If you want 'pretty' switches to look at (?), silver cleaner is your
> weapon of choice. If you
> want your radio to work for years without further attention to switch
> continuity, stick with DeoxIT.

Yahoo! Groups Links

11963. RE: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:15:45 UTC
From: Wayne Smith
Topic: 11954 Message: 11963

So that I understand completely, just general spraying of the wafer switch with DeOxit is not a good idea. It is better to use small doses applied directly to the contact.

This said, my process of spraying, working the switch through its settings, then using compressed air to blow out any remaining liquid from the spray left on the wafer is probably not such a good idea? Thoughts on this? Even with this process I still have the "grunge" on the contact parts of the wafer switches.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Tuesday, February 12, 2013 10:57 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

I went through this lesson last year, when I did my first two (ever) radio resurrections. One was an R4-C. I tried most of the mentioned methods, and have since come to the conclusion that DeOxIT D100L, with the needle applicator, is the preferred product, for switch contacts. It takes very little, so a small bottle, will last a very long time. Also, I have on hand, DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable resistors, and such. Since those first two radios, I have done a few more, and been much happier with the results of the DeOxIT products, available from Amazon.com.
I hope this information helps.

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Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

On Feb 12, 2013, at 8:23 AM, Joe wrote:

THANK-YOU!

I was surprised no one mentioned using DeoxIT until Garey! I use D100 for all my switch cleaning and it also protects and coats the contacts as well. I get the little spray can that meters each 'shot', so wastage and object saturation is a thing of the past!

Joe - WA6RKN

----- Original Message -----
From: "Garey Barrell" k4oah@... <mailto:k4oah%40mindspring.com> >
Subject: Re: [DrakeRadio] Grungy Wafer Switches

> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
> bright strip of silver,
> then a little more DeoxIT to protect it from sulfur, works just fine, and
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> So... If you want 'pretty' switches to look at (?), silver cleaner is your

> weapon of choice. If you
> want your radio to work for years without further attention to switch
> continuity, stick with DeoxIT.

Yahoo! Groups Links

[Non-text portions of this message have been removed]

11964. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:19:24 UTC
From: Joe
Topic: 11954 Message: 11964

As I said, I use the spray can that meters each 'shot' of chemical. There is no over saturation of the subject area!

Joe - WA6RKN

----- Original Message -----
From: "Wayne Smith" <oilieone@...>
Subject: RE: [DrakeRadio] Grungy Wafer Switches

> So that I understand completely, just general spraying of the wafer switch
> with DeOxit is not a good idea. It is better to use small doses applied
> directly to the contact.
> I was surprised no one mentioned using DeoxIT until Garey! I use D100 for
> all my switch cleaning and it also protects and coats the contacts as
> well.
> I get the little spray can that meters each 'shot', so wastage and object
> saturation is a thing of the past!
>
> Joe - WA6RKN
>

11965. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:19:46 UTC
From: L L bahr
Topic: 11954 Message: 11965

Spraying a chemical on a fiber wafer is VERY BAD! Contacts only please. (If you do it on ceramic, you can at least wipe most of it off). Not only will the wet fiber conduct, but it will also swell in size). Believe me, you do not want to spray the whole wafer.

Lee, w0vt

----- Original Message -----

So that I understand completely, just general spraying of the wafer switch with DeOxit is not a good idea. It is better to use small doses applied directly to the contact.

This said, my process of spraying, working the switch through its settings, then using compressed air to blow out any remaining liquid from the spray left on the wafer is probably not such a good idea? Thoughts on this? Even with this process I still have the "grunge" on the contact parts of the wafer switches.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto: DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Tuesday, February 12, 2013 10:57 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

I went through this lesson last year, when I did my first two (ever) radio resurrections. One was an R4-C. I tried most of the mentioned methods, and have since come to the conclusion that DeOxIT D100L, with the needle applicator, is the preferred product, for switch contacts. It takes very little, so a small bottle, will last a very long time. Also, I have on hand, DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable resistors, and such. Since those first two radios, I have done a few more, and been much happier with the results of the DeOxIT products, available from Amazon.com.
I hope this information helps.

Dan Galligan
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Member-Amplitude Modulation Int'l.
Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

On Feb 12, 2013, at 8:23 AM, Joe wrote:

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I get the little spray can that meters each 'shot', so wastage and object
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Joe - WA6RKN

----- Original Message -----
From: "Garey Barrell" k4oah@mindspring.com >
Subject: Re: [DrakeRadio] Grungy Wafer Switches

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> bright strip of silver,
> then a little more DeoxIT to protect it from sulfur, works just fine, and
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> contactremains safely covered by silver sulfide.
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> So... If you want 'pretty' switches to look at (?), silver cleaner is your

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> continuity, stick with DeoxIT.

Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11966. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:31:39 UTC
From: Barry
Topic: 11954 Message: 11966

I think it is a matter of what the switch is used for. Low impedance, low frequency circuits are much less likely to be affected by it.

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Wayne Smith" <oilieone@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 12, 2013 11:15:45 AM
> Subject: RE: [DrakeRadio] Grungy Wafer Switches
>
> So that I understand completely, just general spraying of the wafer
> switch
> with DeOxit is not a good idea. It is better to use small doses
> applied
> directly to the contact.

11967. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:46:43 UTC
From: Dan Galligan
Topic: 11954 Message: 11967

Wayne,
Answers, below your paragraphs.
Dan

On Feb 12, 2013, at 9:15 AM, Wayne Smith wrote:

So that I understand completely, just general spraying of the wafer switch with DeOxit is not a good idea. It is better to use small doses applied directly to the contact.

Absolutely correct. use small amounts directly on the switch contacts, individually.

This said, my process of spraying, working the switch through its settings, then using compressed air to blow out any remaining liquid from the spray left on the wafer is probably not such a good idea? Thoughts on this? Even with this process I still have the "grunge" on the contact parts of the wafer switches.

Using compressed air to "blow it out" simply blows it to another place in the radio, and Lord only knows, if it might be detrimental, to the parts where it winds up. There are contact cleaners, without lubricant, which will evaporate, rather rapidly, but again, they do nothing to protect the switch from further. DeOxIT, with the needle applicator, is the best option, for wafer switches, in my opinion. You can use the 5% or the 100%. Either works well, but the 100% is my preference. And, again, the Fader Lube product from Caig, is the best for variable resistors. And, Caig's DeOxIT Gold, is wonderful for protecting the contact surfaces of metal contacts in plugs and plug receptacles.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Dan Galligan
Sent: Tuesday, February 12, 2013 10:57 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

I went through this lesson last year, when I did my first two (ever) radio resurrections. One was an R4-C. I tried most of the mentioned methods, and have since come to the conclusion that DeOxIT D100L, with the needle applicator, is the preferred product, for switch contacts. It takes very little, so a small bottle, will last a very long time. Also, I have on hand, DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable resistors, and such. Since those first two radios, I have done a few more, and been much happier with the results of the DeOxIT products, available from Amazon.com.
I hope this information helps.

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Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

On Feb 12, 2013, at 8:23 AM, Joe wrote:

THANK-YOU!

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all my switch cleaning and it also protects and coats the contacts as well.
I get the little spray can that meters each 'shot', so wastage and object
saturation is a thing of the past!

Joe - WA6RKN

----- Original Message -----
From: "Garey Barrell" k4oah@... <mailto:k4oah%40mindspring.com> >
Subject: Re: [DrakeRadio] Grungy Wafer Switches

> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
> bright strip of silver,
> then a little more DeoxIT to protect it from sulfur, works just fine, and
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> So... If you want 'pretty' switches to look at (?), silver cleaner is your

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Yahoo! Groups Links

[Non-text portions of this message have been removed]

Yahoo! Groups Links

11968. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 17:58:38 UTC
From: Garey Barrell
Topic: 11954 Message: 11968

Wayne -

Correct. General spraying is not a good idea. I have seen a few phenolic wafers that swelled up
enough from 'an unknown cleaner' to misalign the contacts.

The 'other' problem with spraying is that most DeoxIT products leave a small protectant behind.
This material on 'everything' serves only to collect dust, which is between HV carrying contacts can
carbonize and develop leakage paths.

I prefer D100L in the needle applicator bottle for major cleaning, applied directly to each fixed
contact and exercised through the switch action. This results in the 'thin silver line'. I then
apply a few drops of Gold, which is a little heavier protectant, for good measure. By the way, as
someone else suggested, the 'FaderLube' spray product works wonders on carbon pots.

That thinsilver line is the contact point, and the rest is protected by a nice, black coat of silver
sulfide! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Wayne Smith wrote:
> So that I understand completely, just general spraying of the wafer switch
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> directly to the contact.
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> then using compressed air to blow out any remaining liquid from the spray
> left on the wafer is probably not such a good idea? Thoughts on this? Even
> with this process I still have the "grunge" on the contact parts of the
> wafer switches.
>
>
>
> Wayne

>
> K5FEX
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Dan Galligan
> Sent: Tuesday, February 12, 2013 10:57 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
>
>
>
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> I went through this lesson last year, when I did my first two (ever) radio
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> DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable
> resistors, and such. Since those first two radios, I have done a few more,
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> I hope this information helps.
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> Dan Galligan
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> Real radios glow in the dark
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> On Feb 12, 2013, at 8:23 AM, Joe wrote:
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> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Garey Barrell" k4oah@... <mailto:k4oah%40mindspring.com> >

> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
>> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
>> bright strip of silver,
>> then a little more DeoxIT to protect it from sulfur, works just fine, and
>> the rest of the
>> contactremains safely covered by silver sulfide.
>>
>> So... If you want 'pretty' switches to look at (?), silver cleaner is your
>> weapon of choice. If you
>> want your radio to work for years without further attention to switch
>> continuity, stick with DeoxIT.
> ------------------------------------
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> Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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11969. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 18:45:55 UTC
From: Robert Logan
Topic: 11954 Message: 11969

Hey Steve, can I borrow that dollar bill from you when finish? I've heard a fifty works better and perhaps I could borrow that as well. I'll be sure to return it. Bob, NZ5A

Sent from my iPhone

On Feb 12, 2013, at 10:21 AM, "Stephen Finch" <ai0w@...> wrote:

I've used a brand new dollar bill and slid it between the contacts and slide back and forth. This has worked on all but the worst oxidized switches.

Steve

Stephen Finch

AI0W

ARRL Technical Coordinator - North Florida Section

Ai0w@...

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Eddy Swynar
Sent: Tuesday, February 12, 2013 9:51 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

On 2013-02-12, at 9:45 AM, Mark Brueggemann wrote:

>
> I don't typically work on boatanchors but when I do, invariably the wafer switch contacts and wipers are black with oxidation.
>
> Is there a prevailing technique for cleaning these up? I'm just wondering if there's something better than spraying with contact cleaner and working the switch until the wiper wears a clean groove in the contacts.

Hi Mark,

Others dispute the technique, but I've very successfully "rubbed" the contacts clean here with little more than a good eraser-end of a lead pencil...

Just be careful to blow away any residual rubber, and do not disturb any of the fixed contacts by hitting them hard with the eraser.

It works very well, & the oxidation comes off with a minimum of effort...

~73~ de Eddy VE3CUI - VE3XZ

It works VERY VERY well---the oxidation comes off with little effort.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

11970. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 18:50:27 UTC
From: Eddy Swynar
Topic: 11954 Message: 11970

On 2013-02-12, at 1:45 PM, Robert Logan wrote:

> Hey Steve, can I borrow that dollar bill from you when finish? I've heard a fifty works better and perhaps I could borrow that as well. I'll be sure to return it. Bob, NZ5A
>

Hi Bob,

I'd send you one of our Canadian "Loonie" dollar coins to do the job for you, but I'm afraid its thickness would distort all of your contact wafers...! :o)

~73~ de Eddy VE3CUI - VE3XZ_,_._,___

[Non-text portions of this message have been removed]

11971. RE: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 19:10:07 UTC
From: Wayne Smith
Topic: 11954 Message: 11971

Busted is all I can say.. Thanks all! Guess I'll do some more cleaning, just better process.

Wayne

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Tuesday, February 12, 2013 11:59 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy Wafer Switches

Wayne -

Correct. General spraying is not a good idea. I have seen a few phenolic wafers that swelled up
enough from 'an unknown cleaner' to misalign the contacts.

The 'other' problem with spraying is that most DeoxIT products leave a small protectant behind.
This material on 'everything' serves only to collect dust, which is between HV carrying contacts can
carbonize and develop leakage paths.

I prefer D100L in the needle applicator bottle for major cleaning, applied directly to each fixed
contact and exercised through the switch action. This results in the 'thin silver line'. I then
apply a few drops of Gold, which is a little heavier protectant, for good measure. By the way, as
someone else suggested, the 'FaderLube' spray product works wonders on carbon pots.

That thinsilver line is the contact point, and the rest is protected by a nice, black coat of silver
sulfide! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Wayne Smith wrote:
> So that I understand completely, just general spraying of the wafer switch
> with DeOxit is not a good idea. It is better to use small doses applied
> directly to the contact.
>

>
>
> This said, my process of spraying, working the switch through its
settings,
> then using compressed air to blow out any remaining liquid from the spray
> left on the wafer is probably not such a good idea? Thoughts on this? Even
> with this process I still have the "grunge" on the contact parts of the
> wafer switches.
>
>
>
> Wayne
>
> K5FEX
>
>
>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
> Behalf Of Dan Galligan
> Sent: Tuesday, February 12, 2013 10:57 AM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
>
>
>
>
> I went through this lesson last year, when I did my first two (ever) radio
> resurrections. One was an R4-C. I tried most of the mentioned methods, and
> have since come to the conclusion that DeOxIT D100L, with the needle
> applicator, is the preferred product, for switch contacts. It takes very
> little, so a small bottle, will last a very long time. Also, I have on
hand,
> DeOxIT Gold, for plugs and tube pins, and DeOxIT Fader Lube, for variable
> resistors, and such. Since those first two radios, I have done a few more,
> and been much happier with the results of the DeOxIT products, available
> from Amazon.com.
> I hope this information helps.
>
> Dan Galligan
> W3RXO/W6
> Pomona, CA
> DM14cb
> w3rxo@... <mailto:w3rxo%40mac.com>
> Real radios glow in the dark
> Member-Collins Collector's Assoc.
> Member-Collins Radio Assoc.
> Member-Amplitude Modulation Int'l.

> Collector of Drake, Collins and other fine AMERICAN made, tube-type
radios.
>
> On Feb 12, 2013, at 8:23 AM, Joe wrote:
>
> THANK-YOU!
>
> I was surprised no one mentioned using DeoxIT until Garey! I use D100 for
> all my switch cleaning and it also protects and coats the contacts as
well.
> I get the little spray can that meters each 'shot', so wastage and object
> saturation is a thing of the past!
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Garey Barrell" k4oah@... <mailto:k4oah%40mindspring.com>
>
> Subject: Re: [DrakeRadio] Grungy Wafer Switches
>
>> A little DeoxIT, a gentle exercising of the switch to dig out that nice,
>> bright strip of silver,
>> then a little more DeoxIT to protect it from sulfur, works just fine, and
>> the rest of the
>> contactremains safely covered by silver sulfide.
>>
>> So... If you want 'pretty' switches to look at (?), silver cleaner is
your
>> weapon of choice. If you
>> want your radio to work for years without further attention to switch
>> continuity, stick with DeoxIT.
> ------------------------------------
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> Yahoo! Groups Links
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11972. Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 20:31:08 UTC
From: Al
Topic: 11767 Message: 11972

I just sent you $3.00 (just in case you need a little extra for a padded envelope or packing material).

Thanks,
Al

--- In DrakeRadio@yahoogroups.com, K4GM-George wrote:
>
> PayPal is ok. How about $2.50 which includes the stamp ?
>
> On 2/11/2013 4:23 PM, Al wrote:
> >
> > How much do you want for 8 of them (including postage)? Let me know if
> > PayPal is ok. That would make it easy, or if you want a check, I can
> > do that.
> >
> > Thanks,
> > Al
> >
> > --- In DrakeRadio@yahoogroups.com
> > , K4GM-George wrote:
> > >
> > > I think I could help. Just bought a pouch of 50!
> > >
> > > George K4GM
> > >
> > >
> > > On 2/7/2013 10:02 AM, Al Schichler wrote:
> > > >
> > > > If anyone has a few extra of the black slotted-type 6-32 screws, i
> > would
> > > > be interested in buying about 5 of them. I just acquired an R-4A
> > that is
> > > > missing all the top cabinet screws.
> > > >
> > > > Thanks,
> > > > Al, WA2S
> > > >
> > > >
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> > > >
> > > > [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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11973. Re: [DrakeRadio] Re: Case Screw sizes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 20:43:16 UTC
From: K4GM-George
Topic: 11767 Message: 11973

Thanks. I will get them out to you soon.

On 2/12/2013 3:31 PM, Al wrote:
>
> I just sent you $3.00 (just in case you need a little extra for a
> padded envelope or packing material).
>
> Thanks,
> Al
>
> --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com>, K4GM-George wrote:
> >
> > PayPal is ok. How about $2.50 which includes the stamp ?
> >
> > On 2/11/2013 4:23 PM, Al wrote:
> > >
> > > How much do you want for 8 of them (including postage)? Let me
> know if
> > > PayPal is ok. That would make it easy, or if you want a check, I can
> > > do that.
> > >
> > > Thanks,
> > > Al
> > >
> > > --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com>
> > > , K4GM-George wrote:
> > > >
> > > > I think I could help. Just bought a pouch of 50!
> > > >
> > > > George K4GM
> > > >
> > > >
> > > > On 2/7/2013 10:02 AM, Al Schichler wrote:
> > > > >
> > > > > If anyone has a few extra of the black slotted-type 6-32
> screws, i
> > > would
> > > > > be interested in buying about 5 of them. I just acquired an R-4A
> > > that is
> > > > > missing all the top cabinet screws.
> > > > >
> > > > > Thanks,
> > > > > Al, WA2S

> > > > >
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> > > > [Non-text portions of this message have been removed]
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11974. Re: Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-12 22:13:38 UTC
From: w7jpg
Topic: 11954 Message: 11974

Hey Joe,
Is the spray can you're using marked with "metered spray"? Or? How recently did you buy it?

The last can I purchased, several years ago, has a typical looking aerosol valve with three settings printed on the top of the can (rotate the spray head to choose L - M - H). I now spray into a small bottle (and use swabs) and stopped spraying into the target because there was too much spray (I thought). It didn't seem to make any difference which setting I used in terms of the amount of material dispensed.
Thanks,
Chris
W7JPG

--- In DrakeRadio@yahoogroups.com, Joe wrote:
>
> As I said, I use the spray can that meters each 'shot' of chemical. There
> is no over saturation of the subject area!
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Wayne Smith"
> Subject: RE: [DrakeRadio] Grungy Wafer Switches
>
>
> > So that I understand completely, just general spraying of the wafer switch
> > with DeOxit is not a good idea. It is better to use small doses applied
> > directly to the contact.
> > I was surprised no one mentioned using DeoxIT until Garey! I use D100 for
> > all my switch cleaning and it also protects and coats the contacts as
> > well.
> > I get the little spray can that meters each 'shot', so wastage and object
> > saturation is a thing of the past!
> >
> > Joe - WA6RKN
> >
>

11975. Re: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 00:58:57 UTC
From: Robert Logan
Topic: 11954 Message: 11975

Maybe I could trade it on eBay for a new wafer or two. Bob

Sent from my iPhone

On Feb 12, 2013, at 12:50 PM, Eddy Swynar <deswynar@...> wrote:

On 2013-02-12, at 1:45 PM, Robert Logan wrote:

> Hey Steve, can I borrow that dollar bill from you when finish? I've heard a fifty works better and perhaps I could borrow that as well. I'll be sure to return it. Bob, NZ5A
>

Hi Bob,

I'd send you one of our Canadian "Loonie" dollar coins to do the job for you, but I'm afraid its thickness would distort all of your contact wafers...! :o)

~73~ de Eddy VE3CUI - VE3XZ_,_._,___

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[Non-text portions of this message have been removed]

11976. RE: [DrakeRadio] Grungy Wafer Switches

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 01:07:01 UTC
From: Rich Arland
Topic: 11954 Message: 11976

Believe it or not....that trick of using a dollar bill actually does work for burnishing conductive surfaces. We use to use them to clean up the crypto card readers in the crypto vault. It would be more than a little tricky to try that with a wafer switch!!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: bob.logan47@...
Date: Tue, 12 Feb 2013 18:58:57 -0600
Subject: Re: [DrakeRadio] Grungy Wafer Switches

Maybe I could trade it on eBay for a new wafer or two. Bob

Sent from my iPhone

On Feb 12, 2013, at 12:50 PM, Eddy Swynar deswynar@...> wrote:

On 2013-02-12, at 1:45 PM, Robert Logan wrote:

> Hey Steve, can I borrow that dollar bill from you when finish? I've heard a fifty works better and perhaps I could borrow that as well. I'll be sure to return it. Bob, NZ5A

>

Hi Bob,

I'd send you one of our Canadian "Loonie" dollar coins to do the job for you, but I'm afraid its thickness would distort all of your contact wafers...! :o)

~73~ de Eddy VE3CUI - VE3XZ_,_._,___

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[Non-text portions of this message have been removed]

11977. Drake 2B Mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 02:13:53 UTC
From: curtstamp
Topic: 11977 Message: 11977

Has anyone replaced the screw strip on the back of the 2B to use phone plugs which are more easily used with the Drake 2NT?

Tnx for your comments.

11978. carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 06:58:50 UTC
From: Victor
Topic: 11978 Message: 11978

Hi
Does anyone know a source for 33 ohm carbon resistors - not film or oxide must be non inductive.

Cheers

Vic
G4JSS

11979. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 07:32:34 UTC
From: Jim Wiley
Topic: 11978 Message: 11979

What are your requirements? Wattage? Physical size? Mounting style
(axial or radial leads, surface mount, case style, etc.)
What is the application?

- Jim, KL7CC

On 2/12/2013 9:58 PM, Victor wrote:
>
> Hi
> Does anyone know a source for 33 ohm carbon resistors - not film or
> oxide must be non inductive.
>
> Cheers
>
> Vic
> G4JSS
>
>

[Non-text portions of this message have been removed]

11980. RE: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 09:31:24 UTC
From: Ian Reeve
Topic: 11978 Message: 11980

Hi Vic,

What wattage do you need and what is the circuit application for these 33 ohm resistors?

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: g4jss@...
Date: Wed, 13 Feb 2013 06:58:50 +0000
Subject: [DrakeRadio] carbon resistors

Hi

Does anyone know a source for 33 ohm carbon resistors - not film or oxide must be non inductive.

Cheers

Vic

G4JSS

[Non-text portions of this message have been removed]

11981. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 14:09:07 UTC
From: Barry
Topic: 11978 Message: 11981

http://www.mouser.com/Passive-Components/Resistors/Carbon-Composition-Resistors/_/N-5g9p?P=1z0x73v

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "Victor" <g4jss@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, February 13, 2013 12:58:50 AM
> Subject: [DrakeRadio] carbon resistors
>
> Hi
> Does anyone know a source for 33 ohm carbon resistors - not film or
> oxide must be non inductive.
>
> Cheers
>
> Vic
> G4JSS
>
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> Yahoo! Groups Links
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11982. RE: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 14:32:27 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 11982

Hello Ian
Thank you for reply. I need to build new parasitic stoppers for my linear so guess the wattage would be 5w.

Cheers

Vic

11983. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 14:43:13 UTC
From: Garey Barrell
Topic: 11978 Message: 11983

Vic -

Mouser has new carbon composition resistors. Just like the old days, except they're about 50 cents
each for 1/4 or 1/2W. One Watt versions are a couple dollars! If you need higher power, the Ohmite
OX and OY series of _ceramic composition_ resistors are 1 and 2 W sizes, also from Mouser.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Victor wrote:
> Hi
> Does anyone know a source for 33 ohm carbon resistors - not film or oxide must be non inductive.
>
> Cheers
>
> Vic
> G4JSS
>
>
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> Yahoo! Groups Links
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11984. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 15:34:06 UTC
From: Paul Kraemer
Topic: 11978 Message: 11984

Vic
Metal oxide, ceramic, carbon film are non inductive.
Metal oxide used in RF dummy loads in the uhf range
Best choice depends on the particular applicatin
For rf power like grid resistors in linears, parasitic suppressors etc I
prefer the Ohmite ceramic composition type.
Carbon comp resistors are like buggy whips, few people use them anymore but
they are available in limited values from Mouser
Paul K0UYA
----- Original Message -----
From: "Victor" <g4jss@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 13, 2013 12:58 AM
Subject: [DrakeRadio] carbon resistors

> Hi
> Does anyone know a source for 33 ohm carbon resistors - not film or oxide
> must be non inductive.
>
> Cheers
>
> Vic
> G4JSS
>
>
>
> ------------------------------------
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> Yahoo! Groups Links
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11985. Re: [DrakeRadio] TR-4 output spikes low

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 15:51:22 UTC
From: Garey Barrell
Topic: 11939 Message: 11985

Did you checik V13? Or swapout with V19?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

n4guv wrote:
> Hello. My low serial number Drake TR-4's output will go low (20 watts) intermittantly. Normal output is 150 watts. I have replaced V-4 and V-6 with known good tubes. Output tubes are less than a year old. All testing is done into a dummy load. Any ideas where to look next?
>
> 73, N4GUV
>
>

11986. RE: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 15:52:17 UTC
From: Ian Reeve
Topic: 11978 Message: 11986

Hi Vic,

Ah right, I think it unlikely I have any of 5watt rating but I will take a look and let you know.
One of our Club members (Wythall Radio Club) Barry M0DGQ has done a repair on a Yaesu Fl2100B linear, replacing both the grid stopper resistors and the anode parasitic resistors.
For the grid stoppers he used hi-stab resistors, presumably carbon film and for the anode resistors in parallel with the inductors, he used 2 x 56 ohm in parallel to get to the original value or very close to it.

Is the grid or anode resistors you need to replace?

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: g4jss@...
Date: Wed, 13 Feb 2013 14:32:27 +0000
Subject: RE: [DrakeRadio] carbon resistors

Hello Ian

Thank you for reply. I need to build new parasitic stoppers for my linear so guess the wattage would be 5w.

Cheers

Vic

[Non-text portions of this message have been removed]

11987. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 16:34:13 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 11987

Thanks, Garey
I need 33 ohm 2 watt (parts list say 1 watt). Will try Mouser.

Cheers

Vic

11988. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 16:40:08 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 11988

Hi Ian

Thanks for reply.
Looked at handbook parts list and they specify 33 ohm, 1 watt carbon. They look bigger than 1 watt to me.

Cheers

Vic

11989. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 16:54:38 UTC
From: vacuuminded2@...
Topic: 11978 Message: 11989

Careful. Some metal oxide resistors _are_ spiral cut and have a very small amount of inductance like their carbon film cousins.
I've used the non-inductive HPC/PCF series ceramic composition resistors made by KOA Speer before, (very high quality, made in Japan), the working voltage ratings are a little iffy for use in a plate supply though. Not familiar with the Ohmite series, will check them out.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 13, 2013, at 9:34 AM, "Paul Kraemer" <elespe@lisco.com> wrote:

> Vic
> Metal oxide, ceramic, carbon film are non inductive.
> Metal oxide used in RF dummy loads in the uhf range
> Best choice depends on the particular applicatin
> For rf power like grid resistors in linears, parasitic suppressors etc I
> prefer the Ohmite ceramic composition type.
> Carbon comp resistors are like buggy whips, few people use them anymore but
> they are available in limited values from Mouser
> Paul K0UYA
> ----- Original Message -----
> From: "Victor" g4jss@...>
> To: DrakeRadio@yahoogroups.com>
> Sent: Wednesday, February 13, 2013 12:58 AM
> Subject: [DrakeRadio] carbon resistors
>
> > Hi
> > Does anyone know a source for 33 ohm carbon resistors - not film or oxide
> > must be non inductive.
> >
> > Cheers
> >
> > Vic
> > G4JSS
> >
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[Non-text portions of this message have been removed]

11990. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 16:54:44 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 11990

Paul
Thank you for info. Have had loads of helpful response from you and the group and very thankful.

73

Vic

11991. RE: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 17:06:26 UTC
From: Ian Reeve
Topic: 11978 Message: 11991

Hi Vic,

I have a couple of 33 ohm resistors, made by Phier 2 watt rating. They measure 24mm x 8.8mm so are fairly chunky but are non-inductive. I tested for inductance on my meter and they both measure 0.000uH so they should be ok as long as they are not physically too big.
If they are might find some smaller 1 watt ones if I dig deep enough.
Their DC rating should be sufficient as they were designed for chunky valve circuitry.

Let me know

73

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: g4jss@tiscali.co.uk
Date: Wed, 13 Feb 2013 16:54:44 +0000
Subject: Re: [DrakeRadio] carbon resistors

Paul

Thank you for info. Have had loads of helpful response from you and the group and very thankful.

73

Vic

[Non-text portions of this message have been removed]

11992. Re: carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 18:10:53 UTC
From: kb7gp_dave
Topic: 11978 Message: 11992

I must be one of those 'buggy whip' kind-a guys. I happen to have 3 unused 2w 5% you are welcome to. Just send me a small donation when you get a chance. I can mail them today if you still need them.

Dave KB7GP Robinson
kb7gp@...

--- In DrakeRadio@yahoogroups.com, "g4jss@..." wrote:
>
> Thanks, Garey
> I need 33 ohm 2 watt (parts list say 1 watt). Will try Mouser.
>
> Cheers
>
> Vic
>

11993. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 18:24:40 UTC
From: Garey Barrell
Topic: 11978 Message: 11993

Vic -

OK. You'll need the Ohmite OX or OY, I can never recall which is which, 1 or 2 Watts. Physically
they are about the 1/2 and 1W size of the carbon comps. Check the dimensions in the Mouser data
sheet if size is important.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

g4jss@... wrote:
> Thanks, Garey
> I need 33 ohm 2 watt (parts list say 1 watt). Will try Mouser.
>
> Cheers
>
> Vic
>

11994. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 18:28:08 UTC
From: L L bahr
Topic: 11978 Message: 11994

OX are 1 watt, OY are 2 watt.

Lee, w0vt

----- Original Message -----

Vic -

OK. You'll need the Ohmite OX or OY, I can never recall which is which, 1 or 2 Watts. Physically
they are about the 1/2 and 1W size of the carbon comps. Check the dimensions in the Mouser data
sheet if size is important.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

g4jss@tiscali.co.uk wrote:
> Thanks, Garey
> I need 33 ohm 2 watt (parts list say 1 watt). Will try Mouser.
>
> Cheers
>
> Vic
>

[Non-text portions of this message have been removed]

11995. Re: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 19:09:41 UTC
From: Richard Knoppow
Topic: 11978 Message: 11995

----- Original Message -----
From: <vacuuminded2@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 13, 2013 8:54 AM
Subject: Re: [DrakeRadio] carbon resistors

> Careful. Some metal oxide resistors _are_ spiral cut and
> have a very small amount of inductance like their carbon
> film cousins.
> I've used the non-inductive HPC/PCF series ceramic
> composition resistors made by KOA Speer before, (very high
> quality, made in Japan), the working voltage ratings are a
> little iffy for use in a plate supply though. Not
> familiar with the Ohmite series, will check them out.
>
> Regards,
> Chris

some time ago I got a Boonton 250 RX meter. This is a combination of a signal generator, bridge and detector covering frequencies up to about 250 mhz. and intended to measure very low Q devices. I looked at a variety of resistors including modern film resistors. Up to at least 10kohms I did not measure any significant reactance. I should get the thing off the shelf again and make further tests. Unfortunately it is quite heavy and I am limited in lifting.
The instruction book shows an example of a carbon film resistor along with a carbon composition resistor, the film resistor has _less_ reactance leading me to think my measurements were valid.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

11996. Re: [DrakeRadio] Re: carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 19:51:36 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 11996

Dave
I'll go along with that. My address is as per QRZ.com.
Would $10 - $15 be OK? Also, how would you like payment?

Cheers

Vic

11997. Carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-13 20:57:58 UTC
From: Victor
Topic: 11997 Message: 11997

Like to thank you all for your help.
Thanks to Dave {KB7GP) and Ian (M0IDR) it looks like I might have sorted the problem.

73

Vic
G4JSS

11998. WTB Drake TR 6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 02:24:35 UTC
From: wa4bhk
Topic: 11998 Message: 11998

I know this is a long shot, but does anybody have a TR 6 they would like to sell? Please reply off list to wa4bhk@....

Thanks, Lawrence

11999. Need Audio Output Transformer for TR4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 03:11:50 UTC
From: terrycantrell2002
Topic: 11999 Message: 11999

Hello Everyone. I'm looking for a replacement audio output transformer for a TR4 currently under renovation. If you have one please advise and I will work out suitable details... will PayPal or send check for payment and shipping. Thanks, 73's

Terry, W4WTC
tcantrel@...

12000. Grungy amp tank coils (slightly OT)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 06:03:17 UTC
From: w7jpg
Topic: 12000 Message: 12000

Reading Garey's explanation on the properties of silver sulfide in the "Grungy Wafer Switches" topic caused me to wonder about the Grunge that is on the coils in my B&W 850 tank coil assembly. I presume it is also silver sulfide.

My question is: (yep you guessed it!) Is the Grunge on the tank coil also harmless to the operation of said tank coil assy at 4 KVDC and a bunch of RF amps? I've read several "dissertations" by hams that claim this Grunge must be removed (by polishing) in order for the coils to function properly in the High DC Voltage - high RF current environment.

Anyone?

TIA
73,
Chris
W7JPG

12001. Re: [DrakeRadio] Grungy amp tank coils (slightly OT)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 14:53:46 UTC
From: Garey Barrell
Topic: 12000 Message: 12001

Chris -

The basic question here is regarding 'skin effect' at RF. This just says that the higher the
frequency, the less RF current penetrates to the center of theconductor. At UHF and up the RF
current only goes a few thousandths of an inch 'deep' into the conductor. In this case, silver
plating helps efficiency because silver has a lower resistance than copper, and most of the RF is
going through the silver. At HF, silver plating isn't all that helpful. Solid silver would help,
but a thinplating has no real effect. It IS pretty though!

Unfortunately, silver 'tarnishes'. The two most likely forms of tarnish are silver sulfide, the
brown/black stuff, and silver oxide, the whitish stuff that you get on your hands when you open a
new rotary switch from Centralabthat was wrapped in sulfur free paper!! Most of you aren't old
enough to have experienced that! :-) I digress..... Anyway, silver sulfide is soft, and not a very
good conductor. Silver oxide is hard, and just about as good a conductor as silver itself.
Unfortunately there is enough sulfur in today's atmosphere thatsilver sulfide is far and away more
common. Again, at HF silver sulfide isn't that big a deal, since it's a poor conductor, and the RF
current flows deeper in the conductor anyway. Sort of like using insulated wire.

So if you want a pretty silver tank coil, you need to coat it with DeoxIT or lacquer, or something
to protect it from the sulfur in the air. Again, if you attack it with either abrasive or solvent
silver 'cleaner', you'll be removing whatever silver has combinedwith the sulfur (it's 'silver
sulfide', remember) and so the plating gets microscopically thinner each time you polish it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w7jpg wrote:
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>
> Anyone?
>
> TIA
> 73,
> Chris
> W7JPG
>
>
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> Yahoo! Groups Links
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12002. RE: [DrakeRadio] Grungy amp tank coils (slightly OT)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 15:57:47 UTC
From: Bob Spooner
Topic: 12000 Message: 12002

Garey and all,

The advantage of a silver plated copper coil over an unplated coil (at least in the past before silver sulfide became a problem) is that silver oxide is a good conductor while copper oxide is not. Because the current density decreases exponentially with increasing depth, plating a copper coil with silver allowed the conductivity to remain high on the outside of the coil where the density is the highest. A more cost-efficient approach today would be to take a clean copper coil and coat it with enamel to prevent oxidation or corrosion.

73,

Bob AD3K

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Thursday, February 14, 2013 9:54 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Grungy amp tank coils (slightly OT)

Chris -

The basic question here is regarding 'skin effect' at RF. This just says that the higher the
frequency, the less RF current penetrates to the center of theconductor. At UHF and up the RF
current only goes a few thousandths of an inch 'deep' into the conductor. In this case, silver
plating helps efficiency because silver has a lower resistance than copper, and most of the RF is
going through the silver. At HF, silver plating isn't all that helpful. Solid silver would help,
but a thinplating has no real effect. It IS pretty though!

Unfortunately, silver 'tarnishes'. The two most likely forms of tarnish are silver sulfide, the
brown/black stuff, and silver oxide, the whitish stuff that you get on your hands when you open a
new rotary switch from Centralabthat was wrapped in sulfur free paper!! Most of you aren't old
enough to have experienced that! :-) I digress..... Anyway, silver sulfide is soft, and not a very
good conductor. Silver oxide is hard, and just about as good a conductor as silver itself.
Unfortunately there is enough sulfur in today's atmosphere thatsilver sulfide is far and away more

common. Again, at HF silver sulfide isn't that big a deal, since it's a poor conductor, and the RF
current flows deeper in the conductor anyway. Sort of like using insulated wire.

So if you want a pretty silver tank coil, you need to coat it with DeoxIT or lacquer, or something
to protect it from the sulfur in the air. Again, if you attack it with either abrasive or solvent
silver 'cleaner', you'll be removing whatever silver has combinedwith the sulfur (it's 'silver
sulfide', remember) and so the plating gets microscopically thinner each time you polish it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

w7jpg wrote:
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> My question is: (yep you guessed it!) Is the Grunge on the tank coil also harmless to the operation of said tank coil assy at 4 KVDC and a bunch of RF amps? I've read several "dissertations" by hams that claim this Grunge must be removed (by polishing) in order for the coils to function properly in the High DC Voltage - high RF current environment.
>
> Anyone?
>
> TIA
> 73,
> Chris
> W7JPG
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12003. AM, with my C line:

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 17:26:56 UTC
From: dmir2001
Topic: 12003 Message: 12003

Hello group:

Today, I heard a CQ on 15 meter AM... I called, and got a response... Very good report on signal strength, and audio... My question is, what should I watch for as far as trying to be gentle to the finals... They are fan cooled, and I don't run them at full output anyway... Beyond that, any other suggestions? TIA ... 73 ... John ... KB9PBM ...

12004. tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 17:12:50 UTC
From: fred
Topic: 12004 Message: 12004

I have a tr4 that everyone says is off freq on ssb transmit when i have it tuned to their freq on receive.
any suggestions as to the cause of this?
73 fred kc4ena

12005. Re: [DrakeRadio]TR4. crystal filters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 17:51:15 UTC
From: Chgypsy@...
Topic: 12005 Message: 12005

Hi all,
Saw the request for a TR4 audio transformer this morning. Pulled out my parts basketcase.
Don't have the above.

However I went looking and it does have both upper and lower filters..
Unit was # 27166, the filters appear gray in color.
What would be the best way to check out for operational?
Carl wd8nhk

[Non-text portions of this message have been removed]

12006. Precision AM Detector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 18:11:04 UTC
From: Paul Christensen
Topic: 12006 Message: 12006

After acquiring a Drake SW-4 and 4A, I wanted to experiment with a low-distortion AM detector, but not go through the hassle of using an outboard synchronous detector. In reviewing on-line literature, K2CU has developed an interesting low-distortion, full-wave circuit that seems ideal for use in these older receivers where the I.F. is 455 kHz and lower.

I took K2CU's schematic and converted it into a PCB:

http://tinyurl.com/adpl4a8

There are a few changes, mostly in power rail conditioning, polarity protection, grounding options, and the addition of an optional voltage regulator. A 'lytic cap is added after the input supply resistor for power supply decoupling.

In some receivers where the AGC sense is post detector, it may be better to keep the existing square-law diode detector but route the audio from the new detector to the AF stage. In the SW-4 series that isn't an issue. And, in the case of the SW-4A, it's going to get the same Class AB PP audio board as used in my 4B and 4C receivers.

I'm about ready to order a prototype of the PCB and may make a few boards available although I am not getting myself into an order fulfillment business. I'll likely order between 10-20 boards and make them available at my exact cost per board + shipping.

I'll have more info on my QRZ.com page when the boards have been fully tested and ready.

Paul, W9AC

[Non-text portions of this message have been removed]

12007. Re: [DrakeRadio] tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 20:00:31 UTC
From: Garey Barrell
Topic: 12004 Message: 12007

Fred -

How FAR off???? Not easy to do....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

fred wrote:
> I have a tr4 that everyone says is off freq on ssb transmit when i have it tuned to their freq on receive.
> any suggestions as to the cause of this?
> 73 fred kc4ena
>

12008. Re: [DrakeRadio] Precision AM Detector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 20:24:02 UTC
From: BIPI
Topic: 12006 Message: 12008

I am definitely interested. I have a SW4A that would benefit. More later. On the road now.

TU

de Mike K7PI

Sent from my iPhone

On Feb 14, 2013, at 10:11, "Paul Christensen" <w9ac@...> wrote:

> After acquiring a Drake SW-4 and 4A, I wanted to experiment with a low-distortion AM detector, but not go through the hassle of using an outboard synchronous detector. In reviewing on-line literature, K2CU has developed an interesting low-distortion, full-wave circuit that seems ideal for use in these older receivers where the I.F. is 455 kHz and lower.
>
> I took K2CU's schematic and converted it into a PCB:
>
> http://tinyurl.com/adpl4a8
>
> There are a few changes, mostly in power rail conditioning, polarity protection, grounding options, and the addition of an optional voltage regulator. A 'lytic cap is added after the input supply resistor for power supply decoupling.
>
> In some receivers where the AGC sense is post detector, it may be better to keep the existing square-law diode detector but route the audio from the new detector to the AF stage. In the SW-4 series that isn't an issue. And, in the case of the SW-4A, it's going to get the same Class AB PP audio board as used in my 4B and 4C receivers.
>
> I'm about ready to order a prototype of the PCB and may make a few boards available although I am not getting myself into an order fulfillment business. I'll likely order between 10-20 boards and make them available at my exact cost per board + shipping.
>
> I'll have more info on my QRZ.com page when the boards have been fully tested and ready.
>
> Paul, W9AC
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12009. RE: [DrakeRadio] Precision AM Detector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 20:44:47 UTC
From: Bob Spooner
Topic: 12006 Message: 12009

Paul,

Thanks for posting the information. I have a couple of older receivers that could benefit from that.

73,

Bob AD3K

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Paul Christensen
Sent: Thursday, February 14, 2013 1:11 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Precision AM Detector

After acquiring a Drake SW-4 and 4A, I wanted to experiment with a low-distortion AM detector, but not go through the hassle of using an outboard synchronous detector. In reviewing on-line literature, K2CU has developed an interesting low-distortion, full-wave circuit that seems ideal for use in these older receivers where the I.F. is 455 kHz and lower.

I took K2CU's schematic and converted it into a PCB:

http://tinyurl.com/adpl4a8

There are a few changes, mostly in power rail conditioning, polarity protection, grounding options, and the addition of an optional voltage regulator. A 'lytic cap is added after the input supply resistor for power supply decoupling.

In some receivers where the AGC sense is post detector, it may be better to keep the existing square-law diode detector but route the audio from the new detector to the AF stage. In the SW-4 series that isn't an issue. And, in the case of the SW-4A, it's going to get the same Class AB PP audio board as used in my 4B and 4C receivers.

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I'll have more info on my QRZ.com page when the boards have been fully tested and ready.

Paul, W9AC

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12010. Re: tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 21:11:57 UTC
From: fred
Topic: 12004 Message: 12010

it seems to be just a small amount it sounds to the other station
to be a bit high in frequency a few hundred hertz or so.
not so far off as to be unreadable but off.
the previous owner used it for cw only it that makes a diffrence.
73 fred

--- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
>
> Fred -
>
> How FAR off???? Not easy to do....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> fred wrote:
> > I have a tr4 that everyone says is off freq on ssb transmit when i have it tuned to
their freq on receive.
> > any suggestions as to the cause of this?
> > 73 fred kc4ena
> >
>

12011. Re: [DrakeRadio] tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 21:25:43 UTC
From: Gary Poland
Topic: 12004 Message: 12011

Fred,
The first thing that comes to mind is that you are actually tuning in the other station off frequency, possibly do to a miss-adjusted carrier oscillator or a bad sideband filter. Have the other station go to the opposite sideband and listen to you there, just a thought.

73, Gary

http://home.roadrunner.com/~w8pu

R-4A T4-X R-4B T4-XB R-4C T4-XC MS-4 L-4B RCS-4
2A 2B 2C 2NT 2CQ 2AS 4-LF
TR-4 TR-4C TR-4CW/RIT RV-4C MC-4
TR-7 RV-7 CW-75 MS-7
WH-7 W-4 WV-4 MN-2700 MN-4C MN-2000
UV-3 PS-3 TR-22C TR-33C AA-10 AC-10 MMK-22 TR-6
PRN1000

[Non-text portions of this message have been removed]

12012. Re: tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 22:07:35 UTC
From: w1kilofoxtrot
Topic: 12004 Message: 12012

Garey can probably help better than I, but I recall there is a small relay that pulls the BFO off frequency for CW operation. If those contacts are stuck, or dirty (can't remember which), you'll be off by around 500 Hz. Might be worth a look?

73,
Steve
W1KF

--- In DrakeRadio@yahoogroups.com, "fred" wrote:
>
> it seems to be just a small amount it sounds to the other station
> to be a bit high in frequency a few hundred hertz or so.
> not so far off as to be unreadable but off.
> the previous owner used it for cw only it that makes a diffrence.
> 73 fred
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >
> > Fred -
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> > How FAR off???? Not easy to do....
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
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> > fred wrote:
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> > > any suggestions as to the cause of this?
> > > 73 fred kc4ena
> > >
> >
>

12013. Re: [DrakeRadio] Re: tr4 off freq

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 22:29:37 UTC
From: Garey Barrell
Topic: 12004 Message: 12013

Steve -

Interesting thought! Actually that relay shifts the CO about 900 kHz, which would really mess
things up. However..... If the relay contacts are just grungy ... The relay is K2, back in the
left rear corner, mounted on the rear chassis wall. The N.C. contacts are for SSB, so cleaning those
couldn't hurt.

Gary came to the same thought, i.e., CO off frequency, but I'm not sure that would cause it......
Nothing changes in the CO when switching from XMIT to RCVE. IF the CO is off slightly one way, and
the 'other' sideband filter is being used (due to the mixing scheme) it would be off twice as much
through the other filter. This is why I asked 'how far' it was off. Might make it easier to figure out.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w1kilofoxtrot wrote:
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> 73,
> Steve
> W1KF
>
> --- In DrakeRadio@yahoogroups.com, "fred" wrote:
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>>>
>>> 73, Garey - K4OAH
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>>>> any suggestions as to the cause of this?
>>>> 73 fred kc4ena
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> Yahoo! Groups Links
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12014. Re: [DrakeRadio] Need Audio Output Transformer for TR4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-14 21:30:39 UTC
From: Gary Poland
Topic: 11999 Message: 12014

Terry,
If you don’t locate an original transformer try Hammond. I believe the 6AQ5 is around 10k to 15k ohms impedance. I have used non Drake after market transformers in the past with excellent results.

http://www.hammondmfg.com/125SE.htm

73, Gary

[Non-text portions of this message have been removed]

12015. Re: [DrakeRadio] Need Audio Output Transformer for TR4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 00:24:10 UTC
From: Terry Cantrell
Topic: 11999 Message: 12015

Hi Gary:

Thanks for the recommendation on the Audio Output Transformer. I may very well have to go that route and appreciate the advice. One way or another, the TR4 is a sick puppy without any audio/receiver function.

73's

Terry, W4WTC

[Non-text portions of this message have been removed]

12016. RE: [DrakeRadio] carbon resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 10:05:45 UTC
From: g4jss@tiscali.co.uk
Topic: 11978 Message: 12016

Ian

R's arrived this a.m. - excellent and very much appreciated.
Have a good weekend and thanks again.

Vic

12017. Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 15:06:56 UTC
From: terrycantrell2002
Topic: 12017 Message: 12017

I'm considering picking up a tube tester...Hickok or Heathkit. Question to the experts in this distinguished group ..Is there enough value in these older units to make reasonably good tube tests or is it just as effective to stick with substitution in the circuits? Thanks for your thoughts on this question.

73

Terry, W4WTC

12018. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 15:29:17 UTC
From: Ronald Erickson
Topic: 12017 Message: 12018

I like to use tube testers for relative transconductance values to match balanced parallel tubes. Substitution can work if you are not balancing tubes.

73,

Ron, K0IC
k0ic@...

On Fri, Feb 15, 2013 at 9:06 AM, terrycantrell2002
<tcantrel@...>wrote:

> **
>
>
> I'm considering picking up a tube tester...Hickok or Heathkit. Question to
> the experts in this distinguished group ..Is there enough value in these
> older units to make reasonably good tube tests or is it just as effective
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> this question.
>
> 73
>
> Terry, W4WTC
>
>
>

--
Ronald D. Erickson, K0IC
712-379-3614
Magic Jack # 712-587-1836
Heartland Hams
Southwest Iowa Amateur Radio Club
Bellevue Amateur Radio Club
ARRL Local Government Liaison
ARRL Public Information Officer
ARRL Technical Specialist
ARRL, the national association for Amateur Radio?
563-263-3097
ronalderickson777@...
10-X #12938 :* EN20iu
ARRL Lifer since 1976
3900 Club #729
Iowa QRP Club #179

QCWA Lifer #30762; Chapters, 25, 123, 210
FCC #PG-17-12556
FISTS CW Club #12484
Straight Key Century Club #2253
30 Meter Digital Group #3932
Breakfast Club via Amateur Radio # 3396 on 03/16/2011
FGBMFI Life Member since 1985
Salvation Army Team Emergency Radio Network member
Pastor license by Universal Life Church, Modesto, CA 10/09/1976
Trying to join the Shenandoah Assembly of God
The Collins Collectors Association #AC07-12075
Courage HANDI-HAM System member
Ex: WN0GDA, WB0GDA, AK0N, AAV7AW
Ex: KMA-AM broadcast engineer 1977-1989.
Ex: SBE Senior Broadcast Engineer #2308 - Radio - AM/FM
IWCC -Clarinda Associate of Arts Degree - 1973
University of Nebraska at Omaha Bachelor of General Studies Degree - 1993
True Full Swedish-American
k0ic@...
www.contactify.com/c521b
Iowa Disabled Lifetime Fisherman until 2032 or so.
Member ARMS Christian Fellowship Group.

[Non-text portions of this message have been removed]

12019. Re: Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 16:05:48 UTC
From: fred
Topic: 12017 Message: 12019

http://www.tubewizard.com/recommended_Hickok_testers.htm

check this out before you decide . I have used the TV-7 and found it to be very good . I also had a heathkit TV-2 which was also good for general testing but is only an emission type tester . the mutual conduction type are much better . before you buy one make sure it can check modern tubes , not all the older ones can . stay away from the Hickok card-O-matic if you run across one .

andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, "terrycantrell2002" <tcantrel@...> wrote:
>
> I'm considering picking up a tube tester...Hickok or Heathkit. Question to the experts in this distinguished group ..Is there enough value in these older units to make reasonably good tube tests or is it just as effective to stick with substitution in the circuits? Thanks for your thoughts on this question.
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> 73
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> Terry, W4WTC
>

12020. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 16:30:51 UTC
From: Garey Barrell
Topic: 12017 Message: 12020

Terry -

For most things, you're far better off with a tube to substitute. If the tube has actually been
previously used in that position, and worked, it's a 'known good spare' and the best choice.

Tube testers are primarily good if you have a big box of tubes to sort as good/bad.

There are two major types of tester. Most of the old Hickok, TV-7, etc. are 'Mutual Conductance'
testers. These actually set up the tube with a known bias, apply a small signal, and measure the
gain, i.e., a 'real' functional test. There are still a couple of caveats though. One, this is
typically run at 60 Hz, and has only minimal relationshipto operation at RF; and two, the test is
run at only one operating point, again chances are this is different from the in-circuit point. The
other type is merely an emission tester. Here the filament is heated, the various grids are tied to
the Cathode or Plate as appropriate, and the total current is displayed on a "BAD-?-GOOD" scale.
This is solely a test of the Cathodes ability to produce electrons, which is what 'wears out' in a tube.

So unless you have a huge inventory of tubes to check, or equipment with a hundred different tube
types, a set of 'known-good' tubes for each piece of equipment is your best bet. When you get your
new tubes, pick a rainy day and substitute them, one-at-a-time, into the gear they are intended
for. If the unit operates as well as, or nearlyas well as with the original tube, remove the
substitute, replace the original and go on to the next tube. If the substitution results in poor or
no operation, try another potential sub. If neither sub works, are you sure you have the right
sub!?!?! :-) If so, consider the circuit and whether changing a tube 'should' make that big a
difference, and require alignment. I can tell you from experience, there are VERY few instances
where that is the case.

Matching tubes, such as PA tubes in the Drake transmitters, can be done in the transmitter by
installing them one at a time,with a fixed BIAS setting, and measuringthe voltage across the Cathode
resistorto determine the IDLE current of each tube.

So overall, the money invested in a tester would probably be better spent on a few more spares.
Tubes ain't getting any cheaper!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

terrycantrell2002 wrote:
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> Terry, W4WTC
>
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> Yahoo! Groups Links
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12021. Re: [DrakeRadio] Re: Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 16:43:17 UTC
From: Charles Ring
Topic: 12017 Message: 12021

I have a Hickok cardomatic in uncertain condition, which I literally rescued from a dumpster at a radio station being cleared out. The cards are very brittle. What do you know about it?

73 de W3NU

On 2/15/2013 1105, fred wrote:
>
> http://www.tubewizard.com/recommended_Hickok_testers.htm
>
> check this out before you decide . I have used the TV-7 and found it
> to be very good . I also had a heathkit TV-2 which was also good for
> general testing but is only an emission type tester . the mutual
> conduction type are much better . before you buy one make sure it can
> check modern tubes , not all the older ones can . stay away from the
> Hickok card-O-matic if you run across one .
>
> andrew
> kd5pnt
>

[Non-text portions of this message have been removed]

12022. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 17:04:26 UTC
From: Richard Knoppow
Topic: 12017 Message: 12022

----- Original Message -----
From: "terrycantrell2002" <tcantrel@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 15, 2013 7:06 AM
Subject: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

> I'm considering picking up a tube tester...Hickok or
> Heathkit. Question to the experts in this distinguished
> group ..Is there enough value in these older units to make
> reasonably good tube tests or is it just as effective to
> stick with substitution in the circuits? Thanks for your
> thoughts on this question.
>
> 73
>
> Terry, W4WTC

IMO tube testers can be very useful provided you know
what they are testing. Some testers check only for emission
so will not detect many tube problems; they are to be
avoided. Better testers test the amplification of the tube
and indicate the mutual conductance and some testers will
also test for gas in the tube. Nearly all seem to test for
shorts between pins. Mutual conductance is a fairly good
test for the condition of a tube and can be used to match
tubes. The gas test will often indicate why some tubes that
otherwise test good don't work in the circuit.
The military TV-7 series is a very good tester although
not as convenient as some others because it requires
resetting the switches to test both sides of dual tubes.
There are several versions of it but the letter code mostly
indicates the manufacturer. Lots of literature on them on
the web.
Evidently Hickok more or less invented the modern tube
tester and made some very good ones. I don't know which
type the Heathkit one is or if they made more than one type.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12023. Re: [DrakeRadio] Re: Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 17:10:36 UTC
From: Paul Kraemer
Topic: 12017 Message: 12023

Very cool old tester! We had one in shop I worked at during High School. Set up mistakes were none existant and very fast to go from one tube type to another.
If nothing else it should be somewhat of a priceless relic to ebay market
Or, find suitable card stock and replicate the most needed cards, clean it up and use it. Hickok made some very good tube testers
Paul K0UYA
----- Original Message -----
From: "Charles Ring" <w3nu@...>
To: <DrakeRadio@yahoogroups.com>
Cc: "fred" <radiomanl@...>
Sent: Friday, February 15, 2013 10:43 AM
Subject: Re: [DrakeRadio] Re: Vintage Tube Testers....Do they really add much value ?

>I have a Hickok cardomatic in uncertain condition, which I literally
> rescued from a dumpster at a radio station being cleared out. The cards
> are very brittle. What do you know about it?
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> 73 de W3NU
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>> check this out before you decide . I have used the TV-7 and found it
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>> general testing but is only an emission type tester . the mutual
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>> check modern tubes , not all the older ones can . stay away from the
>> Hickok card-O-matic if you run across one .
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>> andrew
>> kd5pnt
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12024. Re: [DrakeRadio] Need Audio Output Transformer for TR4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 18:50:42 UTC
From: Garey Barrell
Topic: 11999 Message: 12024

Gary -

I'm not certain, but I believe that the 6AQ5 is 2000 ohm and the 6EH5 is 10k. Do you have docs
specifying otherwise?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Gary Poland wrote:
> Terry,
> If you don’t locate an original transformer try Hammond. I believe the 6AQ5 is around 10k to 15k ohms impedance. I have used non Drake after market transformers in the past with excellent results.
>
> http://www.hammondmfg.com/125SE.htm
>
> 73, Gary
>

12025. RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 19:55:24 UTC
From: Terry Cantrell
Topic: 12017 Message: 12025

Hi Richard:

Thanks.great information! This is a new area so my knowledge base is a bit limited at this point.

73,

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
Sent: Friday, February 15, 2013 12:04 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

----- Original Message -----
From: "terrycantrell2002" tcantrel@...
<mailto:tcantrel%40bellsouth.net> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Friday, February 15, 2013 7:06 AM
Subject: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

> I'm considering picking up a tube tester...Hickok or
> Heathkit. Question to the experts in this distinguished
> group ..Is there enough value in these older units to make
> reasonably good tube tests or is it just as effective to
> stick with substitution in the circuits? Thanks for your
> thoughts on this question.
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IMO tube testers can be very useful provided you know what they are testing. Some testers check only for emission so will not detect many tube problems; they are to be avoided. Better testers test the amplification of the tube and indicate the mutual conductance and some testers will also test for gas in the tube. Nearly all seem to test for shorts between pins. Mutual conductance is a fairly good test for the condition of a tube and can be used to match tubes. The gas test will often indicate why some tubes that otherwise test good don't work in the circuit.

The military TV-7 series is a very good tester although
not as convenient as some others because it requires
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There are several versions of it but the letter code mostly
indicates the manufacturer. Lots of literature on them on
the web.
Evidently Hickok more or less invented the modern tube
tester and made some very good ones. I don't know which
type the Heathkit one is or if they made more than one type.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

12026. RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 19:53:41 UTC
From: Terry Cantrell
Topic: 12017 Message: 12026

Thanks Garey !

This is pretty much what I thought but needed to hear that for sure. I see some "deals" but as others have suggested, those are probably not in very good functional shape and unless you can test emission and conductance it probably makes low cost testers not very useful. By I really don't have enough tubes to test so we'll just refine the substitution method a bit more. the way, thanks for the other Reflector Members who responded including Evan, Ron, Fred, Charles, and Paul .that input is valuable and appreciated.

73's

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Friday, February 15, 2013 11:31 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Terry -

For most things, you're far better off with a tube to substitute. If the tube has actually been
previously used in that position, and worked, it's a 'known good spare' and the best choice.

Tube testers are primarily good if you have a big box of tubes to sort as good/bad.

There are two major types of tester. Most of the old Hickok, TV-7, etc. are 'Mutual Conductance'
testers. These actually set up the tube with a known bias, apply a small signal, and measure the
gain, i.e., a 'real' functional test. There are still a couple of caveats though. One, this is
typically run at 60 Hz, and has only minimal relationshipto operation at RF; and two, the test is
run at only one operating point, again chances are this is different from the in-circuit point. The
other type is merely an emission tester. Here the filament is heated, the various grids are tied to
the Cathode or Plate as appropriate, and the total current is displayed on a

"BAD-?-GOOD" scale.
This is solely a test of the Cathodes ability to produce electrons, which is what 'wears out' in a tube.

So unless you have a huge inventory of tubes to check, or equipment with a hundred different tube
types, a set of 'known-good' tubes for each piece of equipment is your best bet. When you get your
new tubes, pick a rainy day and substitute them, one-at-a-time, into the gear they are intended
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substitute, replace the original and go on to the next tube. If the substitution results in poor or
no operation, try another potential sub. If neither sub works, are you sure you have the right
sub!?!?! :-) If so, consider the circuit and whether changing a tube 'should' make that big a
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Matching tubes, such as PA tubes in the Drake transmitters, can be done in the transmitter by
installing them one at a time,with a fixed BIAS setting, and measuringthe voltage across the Cathode
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So overall, the money invested in a tester would probably be better spent on a few more spares.
Tubes ain't getting any cheaper!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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terrycantrell2002 wrote:
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12027. Re: [DrakeRadio] Need Audio Output Transformer for TR4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 21:10:23 UTC
From: Gary Poland
Topic: 11999 Message: 12027

Garey,
Actually I think its 5000 ohms for a single ended amplifier and 4 ohm speaker. So much for my memory, HI HI. I used a multiple tap transformer I had on hand at the time. It worked great.

73, gary

[Non-text portions of this message have been removed]

12028. Re: Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-15 23:25:34 UTC
From: Ralph
Topic: 12017 Message: 12028

--- In DrakeRadio@yahoogroups.com, "terrycantrell2002" <tcantrel@...> wrote:
>
> I'm considering picking up a tube tester...Hickok or Heathkit. Question to the experts in this distinguished group ..Is there enough value in these older units to make reasonably good tube tests or is it just as effective to stick with substitution in the circuits? Thanks for your thoughts on this question.
>
> 73
>
> Terry, W4WTC
>

Years ago I repaired CB and some other tube radios for extra money and found the tube tester was of very little use. There were often only a few differant tubes used in the sets. As I usually kept one or more of each in stock, it was just as easy to subistute the tubes, often lots quicker. After about a year and almost no use of the tester, I sold it.

Sometimes the CBers would want me to change out all the tubes in their sets, so I did. There was nothing wrong with them,but when they pay, I do what they want. Then I marked the tubes as used and often popped them in a set to see if it was the tube. If it was, I then got a new tube and put it in. As this was just a hobby side business, if I knew the people and they did not have much money, I would put an old tube in for nothing if they wanted me to.

Most low power tubes seldom go bad for many years unless broken or the filiment burns out. Most tube checkers will not test the high power tubes. Say 50 watts or over, maybe not even that high.

If you have to pay $ 50 or $ 100 for the tester, yo would be beter off buying some extra tubes.

12029. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 00:40:10 UTC
From: Steve Wedge
Topic: 12017 Message: 12029

Picked up my TV-10 D/U at the Framingham (Mass.) Hamfest in 1985, IIRC, for the princely sum of $25. The price tag is still on it This tester has served me well and, while certainly not a substitute for swapping tubes in a situation where you're looking for better performance, it certainly does its job for screening out weak, gassy and shorted tubes.

Yeah, I know I could get 15 - 20x my purchase price today. Not parting with it.

BTW, if you acquire one of these military testers, there is a webpage that gives you all the data from the rollchart, plus some additional tubes that weren't on that chart.

This was compiled by Nolan Lee, who has been an SK for quite a while but whose tube tester data lives on!

http://www.antiqueairwaves.com/nlee/

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terry Cantrell
Sent: Friday, February 15, 2013 2:53 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Thanks Garey !

This is pretty much what I thought but needed to hear that for sure. I see some "deals" but as others have suggested, those are probably not in very good functional shape and unless you can test emission and conductance it probably makes low cost testers not very useful. By I really don't have enough tubes to test so we'll just refine the substitution method a bit more. the way, thanks for the other Reflector Members who responded including Evan, Ron, Fred, Charles, and Paul .that input is valuable and appreciated.

73's

Terry

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Sent: Friday, February 15, 2013 11:31 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12030. TR-4CW with a Digital frequency counter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 01:19:39 UTC
From: JoÃ£o Lopes
Topic: 12030 Message: 12030

Hi all.

I have a TR-4CW and RV-4C and now I'd like to connect both to a digital frequency counter DIRAC.

Is it correct to connect to a pin2 of J2 in TR-4 or same pin in RV-4C?

Can you give some light?

Thanks and 73.

Lopes - PY2SM

12031. RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 02:38:54 UTC
From: Terry Cantrell
Topic: 12017 Message: 12031

Thanks Steve.looks like you made out like a champ!

73's

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Friday, February 15, 2013 7:40 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Picked up my TV-10 D/U at the Framingham (Mass.) Hamfest in 1985, IIRC, for the princely sum of $25. The price tag is still on it This tester has served me well and, while certainly not a substitute for swapping tubes in a situation where you're looking for better performance, it certainly does its job for screening out weak, gassy and shorted tubes.

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Steve Wedge, W1ES/4

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All my computers have my signature with various pearls of wisdom appended thereto.

From: Terry Cantrell
Sent: Friday, February 15, 2013 2:53 PM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Thanks Garey !

This is pretty much what I thought but needed to hear that for sure. I see some "deals" but as others have suggested, those are probably not in very good functional shape and unless you can test emission and conductance it probably makes low cost testers not very useful. By I really don't have enough tubes to test so we'll just refine the substitution method a bit more. the way, thanks for the other Reflector Members who responded including Evan, Ron, Fred, Charles, and Paul .that input is valuable and appreciated.

73's

Terry

From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On
Behalf Of Garey Barrell
Sent: Friday, February 15, 2013 11:31 AM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Terry -

For most things, you're far better off with a tube to substitute. If the tube has actually been
previously used in that position, and worked, it's a 'known good spare' and the best choice.

Tube testers are primarily good if you have a big box of tubes to sort as good/bad.

There are two major types of tester. Most of the old Hickok, TV-7, etc. are 'Mutual Conductance'
testers. These actually set up the tube with a known bias, apply a small signal, and measure the
gain, i.e., a 'real' functional test. There are still a couple of caveats though. One, this is
typically run at 60 Hz, and has only minimal relationshipto operation at RF; and two, the test is
run at only one operating point, again chances are this is different from the in-circuit point. The
other type is merely an emission tester. Here the filament is heated, the various grids are tied to
the Cathode or Plate as appropriate, and the total current is displayed on a "BAD-?-GOOD" scale.
This is solely a test of the Cathodes ability to produce electrons, which is what 'wears out' in a tube.

So unless you have a huge inventory of tubes to check, or equipment with a hundred different tube
types, a set of 'known-good' tubes for each piece of equipment is your best bet. When you get your

new tubes, pick a rainy day and substitute them, one-at-a-time, into the gear they are intended
for. If the unit operates as well as, or nearlyas well as with the original tube, remove the
substitute, replace the original and go on to the next tube. If the substitution results in poor or
no operation, try another potential sub. If neither sub works, are you sure you have the right
sub!?!?! :-) If so, consider the circuit and whether changing a tube 'should' make that big a
difference, and require alignment. I can tell you from experience, there are VERY few instances
where that is the case.

Matching tubes, such as PA tubes in the Drake transmitters, can be done in the transmitter by
installing them one at a time,with a fixed BIAS setting, and measuringthe voltage across the Cathode
resistorto determine the IDLE current of each tube.

So overall, the money invested in a tester would probably be better spent on a few more spares.
Tubes ain't getting any cheaper!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

terrycantrell2002 wrote:
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>
> 73
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> Terry, W4WTC
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12032. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 03:11:15 UTC
From: Robert Logan
Topic: 12017 Message: 12032

I agree with Steve in that tube testers are useful. I have a very good one. While tube substitution is the best method for evaluating tube performance in a circuit, my tester can tell me with accuracy which tubes are clearly bad. When you have a pile of 'em, that's useful. Also when you have good ones, you can compare one to the other. Bob, NZ5A

Sent from my iPhone

On Feb 15, 2013, at 8:38 PM, "Terry Cantrell" <tcantrel@...> wrote:

Thanks Steve.looks like you made out like a champ!

73's

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Friday, February 15, 2013 7:40 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Picked up my TV-10 D/U at the Framingham (Mass.) Hamfest in 1985, IIRC, for the princely sum of $25. The price tag is still on it This tester has served me well and, while certainly not a substitute for swapping tubes in a situation where you're looking for better performance, it certainly does its job for screening out weak, gassy and shorted tubes.

Yeah, I know I could get 15 - 20x my purchase price today. Not parting with it.

BTW, if you acquire one of these military testers, there is a webpage that gives you all the data from the rollchart, plus some additional tubes that weren't on that chart.

This was compiled by Nolan Lee, who has been an SK for quite a while but whose tube tester data lives on!

http://www.antiqueairwaves.com/nlee/

Steve Wedge, W1ES/4

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From: Terry Cantrell
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[mailto:DrakeRadio@yahoogroups.com]
On
Behalf Of Garey Barrell
Sent: Friday, February 15, 2013 11:31 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

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run at only one operating point, again chances are this is different from the in-circuit point. The
other type is merely an emission tester. Here the filament is heated, the various grids are tied to
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new tubes, pick a rainy day and substitute them, one-at-a-time, into the gear they are intended
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12033. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 03:37:16 UTC
From: Richard Knoppow
Topic: 12017 Message: 12033

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, February 15, 2013 4:40 PM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

> Picked up my TV-10 D/U at the Framingham (Mass.) Hamfest
> in 1985, IIRC, for the princely sum of $25. The price tag
> is still on it This tester has served me well and, while
> certainly not a substitute for swapping tubes in a
> situation where you're looking for better performance, it
> certainly does its job for screening out weak, gassy and
> shorted tubes.
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> Yeah, I know I could get 15 - 20x my purchase price today.
> Not parting with it.
>
> BTW, if you acquire one of these military testers, there
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> rollchart, plus some additional tubes that weren't on that
> chart.
>
> This was compiled by Nolan Lee, who has been an SK for
> quite a while but whose tube tester data lives on!
>
> http://www.antiqueairwaves.com/nlee/
>
>
> Steve Wedge, W1ES/4
>
Lee also shows adapters to fit compactron tubes in a
TV-7. I built an adapter to test the finals in the T4B.
Works like a charm and makes it easy to match tubes. An
advantage of the military testers is that there is often
update information on tubes built after the original chart
or book.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12034. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 03:42:35 UTC
From: Garey Barrell
Topic: 12017 Message: 12034

Steve -

Ihave a TV-7D/U that I picked up for about the same price as yours. This one was just back from
Tobyhanna, with a fresh calibration sticker on it. It hasn't been turned on in five years. I used
it once when I bought a box of tubes of unknown condition, and for that it was great.

I had a second one someone gave me, and it had a bad power transformer in it. Sold it for parts for
$350!

Subbing just works better, faster, and unless you have 50 different tube types in your gear, cheaper
too! :-) Plus when you NEED a spare, you have one!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> From: Terry Cantrell
> Sent: Friday, February 15, 2013 2:53 PM
> To: DrakeRadio@yahoogroups.com
> Subject: RE: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?
>
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> Thanks Garey !
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> Terry
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> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Friday, February 15, 2013 11:31 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much
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12035. TR7 Transmitt ISSue

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 13:46:27 UTC
From: Joe
Topic: 12035 Message: 12035

My TR7 has suddenly stopped transmitting I can key the mike but it does not pass any audio. I get virtually no meter deflection. I tried my Keyer as well with no transmit. I don't want to take my golden screwdriver to it without having some clue as to where to start looking. My first thought would be the the antenna change over relay. I can hear it engage but perhaps it is not fully engaging? Anyone have some pointers or suggestions?
Joe N9JCQ

12036. Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 15:52:39 UTC
From: daveincaol
Topic: 12036 Message: 12036

I've been 'appointed' to sell on items of equipment left behind by GM3XIJ (RIP). Amongst the rigs are 5 pieces of Series 4 system. The 'covered' items appear in good condition although I haven't opened them to check. The ones known to have some internal corrosion on the copper plating are the vented Rx and Tx. Fortunately the corrosion in these is restricted to the upward facing horizontal surfaces, the vertical and under surfaces are bright and new looking.

Because these items are for selling on my intention is to refurbish only the outer covers and apply a bit of silver polish to the sockets if necessary.

My quandary is how to treat those copper surfaces where rust has broken through. The worst area has 90% rust and the least perhaps 30-40%.
My thoughts are to clean back with a stiff nylon brush. Vacuum any debris and then apply a rust neutraliser.
If at a later date an owner wished to restore to display standard then would this method cause them least trouble getting the metal replated? If there is a better alternative please let me know.

I don't know if the equipment works as yet. I have made arrangements to take it to the nearest active club who will test it. If it is serviceable I don't think it would be very sensible to do much more than modest restoration. What do you think?

12037. Re: [DrakeRadio] TR7 Transmitt ISSue

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 17:12:46 UTC
From: Jim Shorney
Topic: 12035 Message: 12037

The first step in troubleshooting any sudden 7-line failure is to re-seat all of the plug-in circuit boards (don't forget the boards under the DR-7). The Molex connectors get dirty/oxidized over time, and cause all sorts of interesting problems. Cleaning the connectors and/or sparing application of DeOxit is not a bad idea at this point. While you are in there, make sure all of the grounding fingers are making good contact, and the screws on the shield covers should be snug (but not over-tight, they are easy to strip).

Of course, the relay is a good point to check as well, but they seem to be pretty reliable.

There's a lot of good TR-7 info on wb4hfn.com, if you haven't been there yet.

73

-Jim
NU0C

On Sat, 16 Feb 2013 13:46:27 -0000, Joe wrote:

>My TR7 has suddenly stopped transmitting I can key the mike but it does not pass any audio. I get virtually no meter deflection. I tried my Keyer as well with no transmit. I don't want to take my golden screwdriver to it without having some clue as to where to start looking. My first thought would be the the antenna change over relay. I can hear it engage but perhaps it is not fully engaging? Anyone have some pointers or suggestions?
>Joe N9JCQ
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12038. Re: [DrakeRadio] Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 17:33:19 UTC
From: Paul Kraemer
Topic: 12036 Message: 12038

Just sell as is
The copper cleaning is a frustrating experience and a fact of Drake life
You may do more harm than good and decrease the end value and you will have spent a lot of time with no reward
Those that want these are aware of the problems and how they individually want to deal with them
And please leave the silver polish in the cupboard
Paul K0UYA
----- Original Message -----
From: "daveincaol" <daveincaol@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, February 16, 2013 9:52 AM
Subject: [DrakeRadio] Drake 4 Series Makeover

> I've been 'appointed' to sell on items of equipment left behind by GM3XIJ
> (RIP). Amongst the rigs are 5 pieces of Series 4 system. The 'covered'
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> the vented Rx and Tx. Fortunately the corrosion in these is restricted to
> the upward facing horizontal surfaces, the vertical and under surfaces are
> bright and new looking.
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> the outer covers and apply a bit of silver polish to the sockets if
> necessary.
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> My quandary is how to treat those copper surfaces where rust has broken
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> and then apply a rust neutraliser.
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> there is a better alternative please let me know.
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> restoration. What do you think?
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> Yahoo! Groups Links
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12039. RE: [DrakeRadio] Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 18:26:49 UTC
From: Ian Reeve
Topic: 12036 Message: 12039

Please don't use silver polish, it will do more harm than good. A little (really small spray)of deoxit and manipulation will get the contact surfaces as good as new.

As for the copper, leave as is in my opinion. The issue of corrosion is well known and any prospective purchaser would I am sure have their own methods and would rather know it had not been cleaned and buy "as is"

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: daveincaol@...
Date: Sat, 16 Feb 2013 15:52:39 +0000
Subject: [DrakeRadio] Drake 4 Series Makeover

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[Non-text portions of this message have been removed]

12040. Re: [DrakeRadio] TR7 Transmitt ISSue

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 18:31:04 UTC
From: n9jcq
Topic: 12035 Message: 12040

Thanks Jim. I have been reviewing that site all morning. Excellent advice!

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------
From: Jim Shorney <jshorney@...>
Date:
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR7 Transmitt ISSue

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>Joe N9JCQ
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☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

[Non-text portions of this message have been removed]

12041. Re: [DrakeRadio] Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 18:38:05 UTC
From: Steve Wedge
Topic: 12036 Message: 12041

I'll second the opinion of avoiding silver polish. If you can get deoxit or Cramolin (I think this is still available in EU), apply very sparingly to rotary switch contacts.

If you want to put forth the effort, you can remove as much corrosion as possible using stiff Nylon and sealing with varnish or poly to arrest further corrosion. However, if you are trying to move them quickly, clean up the cabinets and front panels/knobs, test to ensure they're working and sell them. You'll get more if they're working.

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Paul Kraemer
To: DrakeRadio@yahoogroups.com
Sent: Saturday, February 16, 2013 12:33 PM
Subject: Re: [DrakeRadio] Drake 4 Series Makeover

Just sell as is
The copper cleaning is a frustrating experience and a fact of Drake life
You may do more harm than good and decrease the end value and you will have spent a lot of time with no reward
Those that want these are aware of the problems and how they individually want to deal with them
And please leave the silver polish in the cupboard
Paul K0UYA
----- Original Message -----
From: "daveincaol" daveincaol@...>
To: DrakeRadio@yahoogroups.com>
Sent: Saturday, February 16, 2013 9:52 AM
Subject: [DrakeRadio] Drake 4 Series Makeover

> I've been 'appointed' to sell on items of equipment left behind by GM3XIJ
> (RIP). Amongst the rigs are 5 pieces of Series 4 system. The 'covered'
> items appear in good condition although I haven't opened them to check.
> The ones known to have some internal corrosion on the copper plating are
> the vented Rx and Tx. Fortunately the corrosion in these is restricted to
> the upward facing horizontal surfaces, the vertical and under surfaces are
> bright and new looking.
>
> Because these items are for selling on my intention is to refurbish only
> the outer covers and apply a bit of silver polish to the sockets if
> necessary.

>
> My quandary is how to treat those copper surfaces where rust has broken
> through. The worst area has 90% rust and the least perhaps 30-40%.
> My thoughts are to clean back with a stiff nylon brush. Vacuum any debris
> and then apply a rust neutraliser.
> If at a later date an owner wished to restore to display standard then
> would this method cause them least trouble getting the metal replated? If
> there is a better alternative please let me know.
>
> I don't know if the equipment works as yet. I have made arrangements to
> take it to the nearest active club who will test it. If it is serviceable
> I don't think it would be very sensible to do much more than modest
> restoration. What do you think?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

12042. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 19:19:13 UTC
From: Steve Wedge
Topic: 12017 Message: 12042

I suppose I should put that on my "to do" list, Richard. I know I can test 6146's and, of course, the tester has quite a bit of flexibility. How did you arrive at the bias level for the 6JB6?

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Richard Knoppow
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 15, 2013 10:37 PM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

----- Original Message -----
From: "Steve Wedge" w1es1982@...>
To: DrakeRadio@yahoogroups.com>
Sent: Friday, February 15, 2013 4:40 PM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they
really add much value ?

> Picked up my TV-10 D/U at the Framingham (Mass.) Hamfest
> in 1985, IIRC, for the princely sum of $25. The price tag
> is still on it This tester has served me well and, while
> certainly not a substitute for swapping tubes in a
> situation where you're looking for better performance, it
> certainly does its job for screening out weak, gassy and
> shorted tubes.
>
> Yeah, I know I could get 15 - 20x my purchase price today.
> Not parting with it.
>
> BTW, if you acquire one of these military testers, there
> is a webpage that gives you all the data from the
> rollchart, plus some additional tubes that weren't on that
> chart.
>
> This was compiled by Nolan Lee, who has been an SK for
> quite a while but whose tube tester data lives on!
>
> http://www.antiqueairwaves.com/nlee/
>
>

> Steve Wedge, W1ES/4
>
Lee also shows adapters to fit compactron tubes in a
TV-7. I built an adapter to test the finals in the T4B.
Works like a charm and makes it easy to match tubes. An
advantage of the military testers is that there is often
update information on tubes built after the original chart
or book.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

12043. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 20:31:10 UTC
From: Richard Knoppow
Topic: 12017 Message: 12043

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, February 16, 2013 11:19 AM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they
really add much value ?

>I suppose I should put that on my "to do" list, Richard. I
>know I can test 6146's and, of course, the tester has quite
>a bit of flexibility. How did you arrive at the bias level
>for the 6JB6?
>
> Steve Wedge, W1ES/4

The settings are in the charts supplied. There are
adapters for both nine and twelve pin compactrons.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

12044. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 21:06:23 UTC
From: Garey Barrell
Topic: 12017 Message: 12044

Steve -

I'm not familiar with Nolan's adapters, but Dan J Nelson offers a pair of adapters and a lot of data
set points for a reasonable price.

<djn@...>

There is also a LOT of info,primarily on the TV-7, at EB5AVG's site.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I suppose I should put that on my "to do" list, Richard. I know I can test 6146's and, of course, the tester has quite a bit of flexibility. How did you arrive at the bias level for the 6JB6?
>
> Steve Wedge, W1ES/4
>

12045. FS: OEM Instruction Manual for Drake 34-NB Noise Blanker Kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 20:16:49 UTC
From: Bill Jackson
Topic: 12045 Message: 12045

I have for sale an original instruction manual for the Drake model 34-NB Noise Blanker Kit. This manual appears complete and in excellent condition. It came in a box of miscellaneous items that I purchased from an estate sale and is excess to my needs.

I will consider a best offer over $5.60, which is the cost to ship this manual via US Priority Mail Flat Rate.

Please contact me off list at k9rz@... if you are interested.

73 de Bill, K9RZ

[Non-text portions of this message have been removed]

12046. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 21:14:15 UTC
From: Richard Knoppow
Topic: 12017 Message: 12046

```
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, February 16, 2013 1:06 PM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they
really add much value ?

> Steve -
>
> I'm not familiar with Nolan's adapters, but Dan J Nelson
> offers a pair of adapters and a lot of data
> set points for a reasonable price.
>
> <djn@...>
>
> There is also a LOT of info,primarily on the TV-7, at
> EB5AVG's site.
>
> 73, Garey - K4OAH
> Glen Allen, VA

Garey, et al, I sent copies of both Nolan Lee's
spreadsheet and the DJN material to Steve. I accidentally
sent it to the list, which of course, stripped off the
attachments. I no longer remember where I got the material.
Some may have come from BAMA and some from EB5AVG site.
Both sets of information have instructions for making
adapters for both nine- and twelve- pin compactrons. The
adapters are easy to make but its a convenience if you can
get ready-made ones. There were actually adapters supplied
for the TV-7 but they are quite rare.
Nolan Lee's spread sheet also has a page for converting
the arbitrary readings on the TV-7 meter to Gm. The
settings in the two documents are not quite the same, I
chose to use the set that gave Gm readings closest to the
published values.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

12047. Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-16 21:40:20 UTC
From: Steve Wedge
Topic: 12017 Message: 12047

Didn't even look but thanks for the reminder.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Richard Knoppow
To: DrakeRadio@yahoogroups.com
Sent: Saturday, February 16, 2013 3:31 PM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they really add much value ?

----- Original Message -----
From: "Steve Wedge" w1es1982@...>
To: DrakeRadio@yahoogroups.com>
Sent: Saturday, February 16, 2013 11:19 AM
Subject: Re: [DrakeRadio] Vintage Tube Testers....Do they
really add much value ?

>I suppose I should put that on my "to do" list, Richard. I
>know I can test 6146's and, of course, the tester has quite
>a bit of flexibility. How did you arrive at the bias level
>for the 6JB6?
>
> Steve Wedge, W1ES/4

The settings are in the charts supplied. There are
adapters for both nine and twelve pin compactrons.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12048. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 00:03:30 UTC
From: George- K4GM
Topic: 11677 Message: 12048

Garey--

I just made a temporary 19k 2.5 watt resistor from 5 20k resistors I had
and inserted it. Measures 10.4 volts where the collector should connect.
Soldered the collector and turned the RV-4C on. Like magic it works!
So now I will order a permanent resistor. I think you fixed another one.
Thanks for the help.

73, George K4GM

> Garey Barrell <mailto:k4oah@...>
> Monday, February 11, 2013 10:13 PM
> George -
>
> Wow, haven't seen that before. Might be worth sticking a new resistor
> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
> but since most sit with the transceiver controlling, Q3 Collector was
> at 0, and dissipation was continuous in R15. They tended to go up in
> value, so the 5.25W version was installed in new units. A seven or
> ten Watt replacementmight be easier to find today, and there's plenty
> ofroom. You want just the end of that resistor going to the PTO
> terminal with the Collector of Q3 disconnected. Should read 11VDC.
> If still 0, time to open the PTO.!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>
>
>
> George- K4GM <mailto:k4gm@...>
> Monday, February 11, 2013 9:36 PM
> Garey-
>
> Yes that is correct except now reads zero voltage on the landing where
> the collector is connected after unsoldering the collector. I
> disconnected R15 and it is completely open. I became suspicious when I
> saw a small chip of ceramic missing on R15. You think C20 shorted(
> or maybe the zener) and blew R15 open ?? A resistor acting like a
> fuse! Reminds me of the old fusistors.....
>

> --George
> Garey Barrell <mailto:k4oah@...>
> Monday, February 11, 2013 9:57 AM
> George -
>
> Just to confirm. Leaving the lead from R15 connected to the PTO, and
> disconnecting the Collector lead from Q3, you still haveonly a
> fraction of a volt on the PTO?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>
>
>
> George- K4GM <mailto:k4gm@...>
> Sunday, February 10, 2013 11:15 PM
> Garey-
>
> Thanks again. Followed your suggestion and could not produce 11
> volts on the bus. So the problem is the zener or C20 or both. I will
> order the replacements. Sure wish I could get to these parts without
> removing the PTO but that doesn't look likely....
>
> -- 73, George K4GM
>
> Garey Barrell <mailto:k4oah@...>
> Sunday, February 10, 2013 11:47 AM
> George -
>
> OK. With the RV-4Cset to control, just short the Base to ground, and
> see if the Collector comes up to 11V. If not, disconnect the
> Collector lead from the PTO supply bus and see if the bus comes up to
> 11V. If it DOES, Q3 is shorted. If it does NOT come up, then the
> short is internal to the PTO, a shorted C20 or Zener.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
>
>
>

[Non-text portions of this message have been removed]

12049. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 02:55:20 UTC
From: Garey Barrell
Topic: 11677 Message: 12049

George -

Cool!! Always nice when one comes to life! :-)

If you would, please write up a little description of the symptoms, what you found and how you fixed
it to post to the list. Since we worked this one out 'off the books', it would be nice to get it
into the Archives of DrakeRadio:Yahoo.

Thanks!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George- K4GM wrote:
> Garey--
>
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> and inserted it. Measures 10.4 volts where the collector should connect.
> Soldered the collector and turned the RV-4C on. Like magic it works!
> So now I will order a permanent resistor. I think you fixed another one.
> Thanks for the help.
>
> 73, George K4GM
>
>> Garey Barrell <mailto:k4oah@...>
>> Monday, February 11, 2013 10:13 PM
>> George -
>>
>> Wow, haven't seen that before. Might be worth sticking a new resistor
>> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
>> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
>> but since most sit with the transceiver controlling, Q3 Collector was
>> at 0, and dissipation was continuous in R15. They tended to go up in
>> value, so the 5.25W version was installed in new units. A seven or
>> ten Watt replacementmight be easier to find today, and there's plenty
>> ofroom. You want just the end of that resistor going to the PTO
>> terminal with the Collector of Q3 disconnected. Should read 11VDC.
>> If still 0, time to open the PTO.!
>>
>> 73, Garey - K4OAH

>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
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>>
>>
>> George- K4GM <mailto:k4gm@...>
>> Monday, February 11, 2013 9:36 PM
>> Garey-
>>
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>> the collector is connected after unsoldering the collector. I
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>> saw a small chip of ceramic missing on R15. You think C20 shorted(
>> or maybe the zener) and blew R15 open ?? A resistor acting like a
>> fuse! Reminds me of the old fusistors.....
>>
>> --George
>> Garey Barrell <mailto:k4oah@...>
>> Monday, February 11, 2013 9:57 AM
>> George -
>>
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>> disconnecting the Collector lead from Q3, you still haveonly a
>> fraction of a volt on the PTO?
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>> 73, Garey - K4OAH
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>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> George- K4GM <mailto:k4gm@...>
>> Sunday, February 10, 2013 11:15 PM
>> Garey-
>>
>> Thanks again. Followed your suggestion and could not produce 11
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>> removing the PTO but that doesn't look likely....
>>
>> -- 73, George K4GM
>>

>> Garey Barrell <mailto:k4oah@...>
>> Sunday, February 10, 2013 11:47 AM
>> George -
>>
>> OK. With the RV-4Cset to control, just short the Base to ground, and
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>> 11V. If it DOES, Q3 is shorted. If it does NOT come up, then the
>> short is internal to the PTO, a shorted C20 or Zener.
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12050. Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 04:37:26 UTC
From: Al
Topic: 12050 Message: 12050

I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.

Thanks and 73,
Al, WA2S

12051. Re: [DrakeRadio] Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 04:45:05 UTC
From: Bernie
Topic: 12050 Message: 12051

Remove the plastic part so it is just the plastic part only...sandwich it between 2 clean pieces of glass...clamp the glasses together using clothes pins all around...set in the sun for a couple hours and then cool it down gradually...unclamp the glass and it should be flat. We were doing a live broadcast one summer from a recreation dock (back in the days when radio played real records on site (45's) and since it was 96 degrees, the spinning records would warp under the sun even before they were completely played. When we returned to the station...it was my job to try to "flatten them" again...and that's the method I used on 2 dozen records....I still have two of them in my collection and they're still flat...

Bernie in ND
WD0GMD

----- Original Message -----
From: Al
To: DrakeRadio@yahoogroups.com
Sent: Saturday, February 16, 2013 10:37 PM
Subject: [DrakeRadio] Drake R-4A, R-4B, or T-4X plastic dial scale

I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.

Thanks and 73,
Al, WA2S

[Non-text portions of this message have been removed]

12052. Re: [DrakeRadio] Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 04:52:20 UTC
From: vacuuminded2@...
Topic: 12050 Message: 12052

Attempt the following at your own risk.......
I once flattened the warped plastic (assuming lexan or a similar acrylic not unlike the Drake dials?) pointer on a Sprague TO-4 Tel-ohmike I rebuilt. -A carefully used hair dryer may be worth a try too- but I VERY cautiously used the microwave, just a few seconds at a time until the plastic became warm enough to hold a flex. I then very quickly sandwiched it between the countertop and a flat, heavy object. After allowing several minutes to sit and cool, it was found to have held its flattening "treatment".
I consider myself lucky that it worked this time, I suspect it would take very little time to burn, or flat out melt it instead of just softening in the microwave. Figured I had nothing to lose, as a replacement for that pointer would be easy to make from a sheet of 1/8" lexan.

If you have an oven that will regulate down to just over 100 degrees, you might give that a shot with the dial sandwiched between two flat (glass would be nice) objects. It would take some time, but going up just a few degrees at a time might land you at the *perfect* temp to soften it amply without going over and hurting, or destroying it.

Just a couple ideas if you can't find a replacement, again proceed at your own risk... YMMV

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Feb 16, 2013, at 10:37 PM, "Al" <aschichler@...> wrote:

> I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
> I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.
>
> Thanks and 73,
> Al, WA2S
>
>

[Non-text portions of this message have been removed]

12053. Power output T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 10:45:24 UTC
From: sm7dlk
Topic: 12053 Message: 12053

My final tubes are probably a bit down, have only abt 75-80 watt out. But this does not concern me since I only need abt. 25 watt to drive my PA. So before looking into a possible replacement of the final tubes I can accept the lower output.

But it is the following that I need to have explained.

Say I have 75 watt in TUNE with the Gain set to abt 12 a clock. But in CW and with GAIN in the same position and with key down I have only abt 15 watt. To get 75 watt I have to turn GAIN fully clockwise. It varies between bands. On 80 is almost OK but on 40 and higher I have to turn GAIN fully to get more or less the same output.

OK. The manual state the following: "Due to different operating condition between TUNE and CW, the power output may be lower in the CW position for a given setting of the GAIN control.

I probably have to do a complete check-up but before I do, what is that "different operating condition" stated in the manual that causes this huge difference between power output in TUNE and CW?

Goran SM7DLK

12054. Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 14:15:43 UTC
From: daveincaol
Topic: 12050 Message: 12054

I thought that the dial may be warped on the R-4A I have. It now appears that the knob shaft has a lot of movement. The shaft is not supported at the outer end and relies for rigidity on the inner bearing.
I have some ideas for fixing it but would appreciate comment.

--- In DrakeRadio@yahoogroups.com, "Al" <aschichler@...> wrote:
>
> I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
> I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.
>
> Thanks and 73,
> Al, WA2S
>

12055. Re: [DrakeRadio] Power output T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 16:11:00 UTC
From: Garey Barrell
Topic: 12053 Message: 12055

Goran -

This is normal. It sounds like your PA tubes are pretty tired. Ensure that both arestill working.

The TUNE signal and CW signal are generated by entirely different methods.

TUNE converts the MIC amp to a ~ 1kHz audio oscillator (also used for SIDETONE). This single tone
is applied to the Balanced Modulator to generate a single tone SSB signal. Think whistling into the
microphone. The transmit ALC is also active, which is why (with decent PA tubes) the output goes up
rapidly to about 130W and 'levels out' even with further increased GAIN adjustment. This is the ALC
taking control.

CW shifts the Carrier oscillator ~ 900 Hz up into the LSB filter passband. The Balanced Modulator
is unbalanced by a DC current, controlled by a second section of the GAIN control, that is applied
to the diode ring. This allows the CO signal togo on through the BM with minimal attenuation, and
it is then applied to the Mixer and on through the rest of the transmit chain, just like an SSB
signal. There is no ALC applied, which is why you can often get more power output in CW than in
TUNE. Again, with GOOD PA tubes.!

The extreme difference you are seeing is probably an artifact of the lack of PA gain. There WILL be
more output available on CW, as explained above, and since the GAIN control has two isolated
sections there is no realrelationship between the modes. Some transmitters require more GAIN on CW
than others, especially on the higher bands, but most reachnominal output by 1 - 2 o'clock setting
of the GAIN control. TUNE will 'flatten out' SSB at about 10 - 11 o'clock.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

sm7dlk wrote:
> My final tubes are probably a bit down, have only abt 75-80 watt out. But this does not concern me since I only need abt. 25 watt to drive my PA. So before looking into a possible replacement of the final tubes I can accept the lower output.
>
> But it is the following that I need to have explained.
>
> Say I have 75 watt in TUNE with the Gain set to abt 12 a clock. But in CW and with GAIN in the same position and with key down I have only abt 15 watt. To get 75 watt I have to turn GAIN fully clockwise. It varies between bands. On 80 is almost OK but on 40 and higher I have to turn GAIN fully to get more or less the same output.
>
> OK. The manual state the following: "Due to different operating condition between TUNE and CW, the power output may be lower in the CW position for a given setting of the GAIN control.
>
> I probably have to do a complete check-up but before I do, what is that "different operating condition" stated in the manual that causes this huge difference between power output in TUNE and CW?
>
> Goran SM7DLK
>
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
>

12056. Re: [DrakeRadio] Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 16:21:49 UTC
From: Garey Barrell
Topic: 12050 Message: 12056

Dave -

Sounds like the rear support adjustment has been loosened too much. There is an Allen setscrew that
supports the rear of the threaded lead screw. As it is tightened, it applies pressure to the front
bearing. It should be just tight enough to eliminate side play in the MAIN TUNING knob.

I believe in the "A" you'll have to remove the PTO can to get to the adjustment. GENTLY compress
the clips on either side to allow removal of the can. Looking inside from the back, you'll see the
set screw in the center. FYI, you should have ten (10) balls in the front bearing support, and one
(1) ball under the rear setscrew. Hopefully yours isn't so loose as to lose any bearings. Be careful
not to disturb any wiring or components inside the PTO can. SOME can be quite critical and affect
linearity.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

daveincaol wrote:
>
> I thought that the dial may be warped on the R-4A I have. It now appears that the knob shaft has a lot of movement. The shaft is not supported at the outer end and relies for rigidity on the inner bearing.
> I have some ideas for fixing it but would appreciate comment.
>
> --- In DrakeRadio@yahoogroups.com, "Al" <aschichler@...> wrote:
>> I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
>> I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.
>>
>> Thanks and 73,
>> Al, WA2S

>>

12057. To Be (2B) Continued

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 19:28:22 UTC
From: Mark Brueggemann
Topic: 12057 Message: 12057

I ordered some Caig D100 and Fader Lube for my grungy contacts and controls. I have some other projects I can use it on so it wasn't hard to justify. Thanks everyone for the input on that topic.

Now, another facet of my 2B resurrection is some of the wiring is burned up. At some point it was powered up with one of the dial lamps floating around and it shorted to ground, toasting some of the 6.3V supply wires.

Now, I *could* just use any old wire of sufficient size and replace the various pieces. But like many folks on this list, I'd like to at least make an attempt at having it look as well as work right.

I need some 22ga (.025") solid copper wire, 300V (.060" OD) PVC white wire. For about $30 I can buy a 100' spool of this stuff brand new but there has *got* to be someone here that has some just laying in a pile out in the garage or whatever. Can anyone spare about 3' of the stuff? Happy to pay postage and all that. I must have 40 spools of wire in my garage and it's all stranded. I checked with the home stores and Radio Shack and no one has 22ga.

My replacement caps came from 2BRadioParts the other day so we're off to a good start.

Mark K5LXP
Albuquerque, NM

12058. Re: [DrakeRadio] wire

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 19:46:21 UTC
From: Chgypsy@...
Topic: 12058 Message: 12058

Mark K5LXP

qrq_cw@... writes:

I need some 22ga (.025") solid copper wire, 300V (.060" OD) PVC white wire. For about $30 I can buy a 100' spool of this stuff brand new but there has *got* to be someone here that has some just laying in a pile out in the garage or whatever. Can anyone spare about 3' of the stuff?
Well lets see, Red, Green, Black in 22 solid cu......White in 20 tinned cu. Up to you. Carl WD8NHK

[Non-text portions of this message have been removed]

12059. Re: TR-4CW with a Digital frequency counter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 20:39:39 UTC
From: JoÃ£o Lopes
Topic: 12030 Message: 12059

HI all.

I've already found a solution and my counter is working well.

73s

Lopes.

--- In DrakeRadio@yahoogroups.com, JoÃ£o Lopes <blastofos@...> wrote:
>
> Hi all.
>
> I have a TR-4CW and RV-4C and now I'd like to connect both to a digital frequency counter DIRAC.
>
> Is it correct to connect to a pin2 of J2 in TR-4 or same pin in RV-4C?
>
> Can you give some light?
>
> Thanks and 73.
>
> Lopes - PY2SM
>

12060. Electron Tubes Anyone?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 21:31:43 UTC
From: k3jls@verizon.net
Topic: 12060 Message: 12060

Hello folks:

We are moving to a new and smaller QTH, so I'm trying to downsize a bit to facilitate the move. A while back, I became very interested in restoring some boatanchor gear, so I bought a nice EICO 666 tube tester and had accumulated a bunch of tubes (mostly, NOS) while enjoying this activity.

I would like to offer what I currently have in stock (at a reasonable price) to those who might be interested. Shown below are the items that I currently have.
I'm willing to sell the whole lot or individual components, but I don't have a good deal of time to devote to this activity.

First come ☐ first (reasonable offer) served + USPS shipping (Paypal OK).

2 ☐ Servicemaster NOS 6GE5 tubes (matched set) ☐ will NOT fit in the Drake T4X cage.

1 ☐ 6883B (12 volt 6146B) - NOS
1 ☐ 6SC7 ☐ NOS
1 ☐ 6H6 ☐ NOS
1 ☐ 6K6GT ☐ NOS
1 ☐ 6SG7 GT ☐ NOS
1 ☐ 5Y3WGTB ☐ NOS
1 ☐ 6SA7 ☐ NOS
1 ☐ 6BH6 - NOS
2 ☐ 6EA8 ☐ Test OK
1 ☐ 6AH6 ☐ NOS
1 ☐ 6GY6 / 6GX6 ☐ Test OK
2 ☐ 6DC6 ☐ Test OK
3 ☐ JAN 5750 (6BE6) ☐ Test OK
2 ☐ 6BA6 ☐ Test OK
2 ☐ 12BE6 ☐ Test OK ☐ Unboxed
1 ☐ 12BA6 ☐ Test OK ☐ Unboxed
1 ☐ 5U4GB ☐ Test OK - Unboxed

73's - Joe - K3JLS

12061. Re: [DrakeRadio] Power output T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-17 23:59:20 UTC
From: Steve Wedge
Topic: 12053 Message: 12061

Goran, this sounds normal: Every transmitter I've owned needs the GAIN advanced for the same output in CW mode. When in the TUNE position, the rig is actually transmitting a sine wave through the audio circuit, so there's some gain there.

75W out does suggest the finals are getting tired, but make sure your levels in to the finals are as they should be. There have been some discussions about resistor values drifting, which can affect the operation of the final.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: sm7dlk
To: DrakeRadio@yahoogroups.com
Sent: Sunday, February 17, 2013 5:45 AM
Subject: [DrakeRadio] Power output T-4XB

My final tubes are probably a bit down, have only abt 75-80 watt out. But this does not concern me since I only need abt. 25 watt to drive my PA. So before looking into a possible replacement of the final tubes I can accept the lower output.

But it is the following that I need to have explained.

Say I have 75 watt in TUNE with the Gain set to abt 12 a clock. But in CW and with GAIN in the same position and with key down I have only abt 15 watt. To get 75 watt I have to turn GAIN fully clockwise. It varies between bands. On 80 is almost OK but on 40 and higher I have to turn GAIN fully to get more or less the same output.

OK. The manual state the following: "Due to different operating condition between TUNE and CW, the power output may be lower in the CW position for a given setting of the GAIN control.

I probably have to do a complete check-up but before I do, what is that "different operating condition" stated in the manual that causes this huge difference between power output in TUNE and CW?

Goran SM7DLK

[Non-text portions of this message have been removed]

12062. Re: [DrakeRadio] Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 00:02:37 UTC
From: Steve Wedge
Topic: 12050 Message: 12062

Also, if the problem has recently surfaced - especially after removing/replacing the light bulb holder/blue filter assembly, be sure it's not actually dragging on the filter material.The filter layers should be behind the metal piece.

I've had a dial scrape only to find that I'd put it back together wrong.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: daveincaol
To: DrakeRadio@yahoogroups.com
Sent: Sunday, February 17, 2013 9:15 AM
Subject: [DrakeRadio] Re: Drake R-4A, R-4B, or T-4X plastic dial scale

I thought that the dial may be warped on the R-4A I have. It now appears that the knob shaft has a lot of movement. The shaft is not supported at the outer end and relies for rigidity on the inner bearing.
I have some ideas for fixing it but would appreciate comment.

--- In DrakeRadio@yahoogroups.com, "Al" wrote:
>
> I'm in the process of refurbing an R-4A, and I discoverd that it has a warped dial scale, which scrapes the copper chassis in front of it at some positions. I was wondering if anyone has a dial scale that is flat and would like to sell it, or if anyone knows how to successfully flatten a plastic dial.
> I saw some posts about it from 2011, but I don't know if anyone has really had success with that sort of thing. I thought about clamping it between a couple pieces of wood and baking it. Any thoughts? I don't want to destroy it, but I'll give it a try if it has a good chance of working.
>
> Thanks and 73,
> Al, WA2S
>

[Non-text portions of this message have been removed]

12063. WTB Drake MN4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 00:26:37 UTC
From: curtstamp
Topic: 12063 Message: 12063

Interested in buying a Drake MN4 Tuner in good condition and no physical damage. Let me know what you can offer.

12064. Re: [DrakeRadio] WTB Drake MN4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 00:33:59 UTC
From: Joe
Topic: 12063 Message: 12064

I have one...rate it 9.5 out of 10..maybe even higher...no wear or scratches, no metal corrosion...excellent condition.

I am in Reno, Nevada

Make offer and let me know where you live (zip code) so I can determine shipping costs.

Joe Wolfe - WA6RKN

----- Original Message -----
From: "curtstamp" <Curtstamp@...>
Subject: [DrakeRadio] WTB Drake MN4

> Interested in buying a Drake MN4 Tuner in good condition and no physical
> damage. Let me know what you can offer.

12065. Re: [DrakeRadio] Bringing my TR-4 back to life

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 01:32:15 UTC
From: Mark Pilant
Topic: 11909 Message: 12065

With some help and encouragement from Garey, I have found and corrected a number of problems with the TR-4. In my last post to the list, I said it appeared the rig wasn't completely dead, and was responding to a signal.

And now the story continues...

The "problem" with the S-meter was a simple one... I just didn't zero it. After zeroing the S-meter, it seems to be behaving correctly.

I double checked all the power supply voltages and they were fine. A bit higher because the line voltage at our house can sometimes push 130 VAC. (We are right off the pole transformer, not down the line.)

Since I was having strange audio problems, at Garey's suggestion I checked the voltages at all the tube pins. While most were OK (within [arbitrary] 10% of the values in the table), some were really out.

Before I went too much further, I decided to give all the tube sockets a shot of Deoxit. I had planned to do this before I did the voltage check, but forgot in my enthusiasm :-)

After the tube socket cleaning, I decided to start another voltage check. But, before I did, by a fortunate circumstance, I was just exercising the mode switch and when I switched to the X-CW position, I heard the side tone from the speaker.

Instead of doing the voltage check, which I will still do, I opted to hook up my antenna and see what I could hear on 40m SSB. WOW, as I tuned the dial I started hearing hams on the air, and the volume control really worked.

All in all, a number of strange things appeared to have been "cured" by cleaning the tube sockets and tube pins.

More in the next message...

73

- Mark N1VQW

12066. Re: [DrakeRadio] Bringing my TR-4 back to life... PO modifications to be undone

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 01:35:55 UTC
From: Mark Pilant
Topic: 11909 Message: 12066

Continuing on...

Some more things I have uncovered as I try to bring this rig back
to the land of the living...

The PO had installed a relay, of unknown function, with one of the
coil wires going to the key jack, and the other wires just dangling.
This relay is now gone.

A PO had disconnected the J3 relay pins (5 and 8) from the feed-thru
caps going to the (K1) relay. I need to put these back. Especially
since I have ripped out the relay the PO had hacked into place and
put in the proper Drake relay board and relay.

I also was having problems with the 100 KC calibration oscillator
not working. One problem was the pins of the socket were real
loose and some were just barely making contact. So after replacing
the socket with another of the same type (from my junk box :-) the
calibration oscillator is now working. When I set the mode switch
to CAL and hold my scope probe near the plate connection of V5, I
see a signal with the appropriate (10 uS) period.

Now to where I need some help... that's next

73

- Mark N1VQW

12067. Re: [DrakeRadio] Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 01:45:57 UTC
From: Mark Pilant
Topic: 11909 Message: 12067

As I was checking through various things, undoing the relay added by the PO, I noticed there is an original Drake wire just hanging in space.

If anyone happens to have the bottom of their TR-4 off, I'd really appreciate a set of remote eyes to try and see where this wire goes.

The unconnected wire is white with a gray stripe, and is part of a three wire "bundle" which goes between the VOX pot and the chassis. The other two wires, white with brown stripe and white with black strip, go to the PHONES jack. Given the length of the white/gray wire, I suspect it may go to the MIC jack, but I'd like to be sure.

I've tried tracking the wire back to it's source, but it disappears in a larger bundle, and I really don't want to undo it if I can avoid it.

After fixing the problem I know about at the moment, I'll do a voltage check just to get a new baseline. If everything looks reasonably OK, I'll go through the alignment procedures.

73

- Mark N1VQW, awaiting a kind soul with a good set of eyes :-)

12068. Re: Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 02:33:32 UTC
From: matt.newman10
Topic: 11909 Message: 12068

Mark,

I have an orignal Drake wire on my Version 3 TR-4 - white with grey stripe - running from MIC jack TIP to R108 3.3M on Board 4. It runs with two others that terminate at the phone jack - white with black and white with brown, as you describe. Hope this might help.

Matt, VA3MGN

--- In DrakeRadio@yahoogroups.com, Mark Pilant <n1vqw@...> wrote:
>
> As I was checking through various things, undoing the relay added
> by the PO, I noticed there is an original Drake wire just hanging
> in space.
>
> If anyone happens to have the bottom of their TR-4 off, I'd really
> appreciate a set of remote eyes to try and see where this wire
> goes.
>
> The unconnected wire is white with a gray stripe, and is part of a
> three wire "bundle" which goes between the VOX pot and the chassis.
> The other two wires, white with brown stripe and white with black
> strip, go to the PHONES jack. Given the length of the white/gray
> wire, I suspect it may go to the MIC jack, but I'd like to be sure.
>
> I've tried tracking the wire back to it's source, but it disappears
> in a larger bundle, and I really don't want to undo it if I can
> avoid it.
>
> After fixing the problem I know about at the moment, I'll do a
> voltage check just to get a new baseline. If everything looks
> reasonably OK, I'll go through the alignment procedures.
>
> 73
>
> - Mark N1VQW, awaiting a kind soul with a good set of eyes :-)
>

12069. Re: [DrakeRadio] Re: Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 02:58:41 UTC
From: Garey Barrell
Topic: 11909 Message: 12069

Mark -

That is the PTT line. The relay was probably some sort of foot switch or other external control

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

matt.newman10 wrote:
> Mark,
>
> I have an orignal Drake wire on my Version 3 TR-4 - white with grey stripe - running from MIC jack TIP to R108 3.3M on Board 4. It runs with two others that terminate at the phone jack - white with black and white with brown, as you describe. Hope this might help.
>
> Matt, VA3MGN
>
> --- In DrakeRadio@yahoogroups.com, Mark Pilant <n1vqw@...> wrote:
>> As I was checking through various things, undoing the relay added
>> by the PO, I noticed there is an original Drake wire just hanging
>> in space.
>>
>> If anyone happens to have the bottom of their TR-4 off, I'd really
>> appreciate a set of remote eyes to try and see where this wire
>> goes.
>>
>> The unconnected wire is white with a gray stripe, and is part of a
>> three wire "bundle" which goes between the VOX pot and the chassis.
>> The other two wires, white with brown stripe and white with black
>> strip, go to the PHONES jack. Given the length of the white/gray
>> wire, I suspect it may go to the MIC jack, but I'd like to be sure.
>>
>> I've tried tracking the wire back to it's source, but it disappears
>> in a larger bundle, and I really don't want to undo it if I can
>> avoid it.
>>
>> After fixing the problem I know about at the moment, I'll do a
>> voltage check just to get a new baseline. If everything looks
>> reasonably OK, I'll go through the alignment procedures.
>>
>> 73

>>
>> - Mark N1VQW, awaiting a kind soul with a good set of eyes :-)
>>

12070. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 12:45:56 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 12070

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

12071. Re: Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 14:54:31 UTC
From: daveincaol
Topic: 12036 Message: 12071

Thanks to all who have responded to my question re restoring Drake 4 chassis. Points taken and being evaluted.
There's mention in a 'sticky' that TR7 problems largely relate to switches, contacts etc. I've also noted that both Deoxit and Cranolin cleaners have been suggested. The price difference is substantial. I know that we get what we pay for (or at least hope to) but is Deoxit worth 4 times as much? Or is Cranolin basically an alcohol solvent mostly good for degeasing.
I ask because there is a TR7 and PS7 in the equipment I've arranged to be tested in three weeks or so and these haven't been used for perhaps ten years.
Regards
Dave

--- In DrakeRadio@yahoogroups.com, Ian Reeve <ian.radioworkshop@...> wrote:
>
>
> Please don't use silver polish, it will do more harm than good. A little (really small spray)of deoxit and manipulation will get the contact surfaces as good as new.
>
> As for the copper, leave as is in my opinion. The issue of corrosion is well known and any prospective purchaser would I am sure have their own methods and would rather know it had not been cleaned and buy "as is"
>
>
>
>
>
> Ian Reeve MØIDR
>
>
> To: DrakeRadio@yahoogroups.com
> From: daveincaol@...
> Date: Sat, 16 Feb 2013 15:52:39 +0000
> Subject: [DrakeRadio] Drake 4 Series Makeover
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>
> I've been 'appointed' to sell on items of equipment left behind by GM3XIJ (RIP). Amongst the rigs are 5 pieces of Series 4 system. The 'covered' items appear in good condition although I haven't opened them to check. The ones known to have some internal corrosion on the copper plating are the vented Rx and Tx. Fortunately the corrosion in these is restricted to the upward facing horizontal surfaces, the vertical and under surfaces are bright and new looking.
>
>
>
> Because these items are for selling on my intention is to refurbish only the outer covers and apply a bit of silver polish to the sockets if necessary.
>
>
>
> My quandary is how to treat those copper surfaces where rust has broken through. The worst area has 90% rust and the least perhaps 30-40%.
>
> My thoughts are to clean back with a stiff nylon brush. Vacuum any debris and then apply a rust neutraliser.
>
> If at a later date an owner wished to restore to display standard then would this method cause them least trouble getting the metal replated? If there is a better alternative please let me know.
>
>
>
> I don't know if the equipment works as yet. I have made arrangements to take it to the nearest active club who will test it. If it is serviceable I don't think it would be very sensible to do much more than modest restoration. What do you think?
>
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> [Non-text portions of this message have been removed]
>

12072. TR4 troubles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 15:01:50 UTC
From: tjb813
Topic: 12072 Message: 12072

With some guidance from a knowledgable fellow on this list (GArey) I was able to locate the source of the relay "hanging". It was an open diode.

Now that is solved, but there is a newer problem that has now surfaced.

When transmitting I get feedback from the speaker, the receiver acts like it its still active and the receive AGC peggs out. When I un-key, it takes several seconds for the receiver to un-wind. I assume the REC-KEY circuit is still grounded (or shorted to ground via a tube or bypass cap). Plauseable?

Other ideas?

12073. have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 15:12:04 UTC
From: dalepavlicek
Topic: 12073 Message: 12073

I Found a guy with 40' of belden 8421 cable the other day and bought it. Made a set of INJ and OSC cables and have the rest of the remaining cable. If any one in the group is interested in some of the cable,would be happy to cut it into the proper 38' LENGTHS and ship it out. Iam asking for 4.00 for 2, 37" sections ,mailed. Please get back if any interest.
thanks
dale wt4t

12074. have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 15:13:35 UTC
From: dalepavlicek
Topic: 12073 Message: 12074

I Found a guy with 40' of belden 8421 cable the other day and bought it. Made a set of INJ and OSC cables and have the rest of the remaining cable. If any one in the group is interested in some of the cable,would be happy to cut it into the proper 38' LENGTHS and ship it out. Iam asking for 4.00 for 2, 37" sections ,mailed. Please get back if any interest.
thanks
dale wt4t

12075. have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 15:13:35 UTC
From: dalepavlicek
Topic: 12073 Message: 12075

I Found a guy with 40' of belden 8421 cable the other day and bought it. Made a set of INJ and OSC cables and have the rest of the remaining cable. If any one in the group is interested in some of the cable,would be happy to cut it into the proper 38' LENGTHS and ship it out. Iam asking for 4.00 for 2, 37" sections ,mailed. Please get back if any interest.
thanks
dale wt4t

12076. Re: [DrakeRadio] have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 15:35:01 UTC
From: yash@aol.com
Topic: 12073 Message: 12076

sorry for the 3 posts on this message, don't know why it came up 3 times.
dale wt4t

-----Original Message-----
From: dalepavlicek <yash@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Feb 18, 2013 10:13 am
Subject: [DrakeRadio] have 40 feet of belden 8421

I Found a guy with 40' of belden 8421 cable the other day and bought it. Made a set of INJ and OSC cables and have the rest of the remaining cable. If any one in the group is interested in some of the cable,would be happy to cut it into the proper 38' LENGTHS and ship it out. Iam asking for 4.00 for 2, 37" sections ,mailed. Please get back if any interest.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12077. Re: Power output T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:05:01 UTC
From: sm7dlk
Topic: 12053 Message: 12077

Garey,

Thanks a lot for your feedback and explanation, I really appreciate it. Question mark has been straightened. I now understand how the TUNE signal and CW signal are generated by the different methods

This specific T-4XB I have owned since 1972 when I bought it new. It's been resting from time to time but is since 2-3 years in daily use. I did a quick check and found the premixer (V8) weak. Changed the tube and did a light "tune-up". Now exceed 100 watts on all bands. I think I am on the second set of 6JB6A tube on this TX.

73,Thanks
Goran SM7DLK

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Goran -
>
> This is normal. It sounds like your PA tubes are pretty tired. Ensure that both arestill working.
>
> The TUNE signal and CW signal are generated by entirely different methods.
>
> TUNE converts the MIC amp to a ~ 1kHz audio oscillator (also used for SIDETONE). This single tone
> is applied to the Balanced Modulator to generate a single tone SSB signal. Think whistling into the
> microphone. The transmit ALC is also active, which is why (with decent PA tubes) the output goes up
> rapidly to about 130W and 'levels out' even with further increased GAIN adjustment. This is the ALC
> taking control.
>
> CW shifts the Carrier oscillator ~ 900 Hz up into the LSB filter passband. The Balanced Modulator
> is unbalanced by a DC current, controlled by a second section of the GAIN control, that is applied
> to the diode ring. This allows the CO signal togo on through the BM with minimal attenuation, and
> it is then applied to the Mixer and on through the rest of the transmit chain, just like an SSB
> signal. There is no ALC applied, which is why you can often get more power output in CW than in
> TUNE. Again, with GOOD PA tubes.!
>
> The extreme difference you are seeing is probably an artifact of the lack of PA gain.

There WILL be
> more output available on CW, as explained above, and since the GAIN control has two isolated
> sections there is no realrelationship between the modes. Some transmitters require more GAIN on CW
> than others, especially on the higher bands, but most reachnominal output by 1 - 2 o'clock setting
> of the GAIN control. TUNE will 'flatten out' SSB at about 10 - 11 o'clock.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> sm7dlk wrote:
> > My final tubes are probably a bit down, have only abt 75-80 watt out. But this does not concern me since I only need abt. 25 watt to drive my PA. So before looking into a possible replacement of the final tubes I can accept the lower output.
> >
> > But it is the following that I need to have explained.
> >
> > Say I have 75 watt in TUNE with the Gain set to abt 12 a clock. But in CW and with GAIN in the same position and with key down I have only abt 15 watt. To get 75 watt I have to turn GAIN fully clockwise. It varies between bands. On 80 is almost OK but on 40 and higher I have to turn GAIN fully to get more or less the same output.
> >
> > OK. The manual state the following: "Due to different operating condition between TUNE and CW, the power output may be lower in the CW position for a given setting of the GAIN control.
> >
> > I probably have to do a complete check-up but before I do, what is that "different operating condition" stated in the manual that causes this huge difference between power output in TUNE and CW?
> >
> > Goran SM7DLK
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> > Yahoo! Groups Links
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12078. Re: [DrakeRadio] TR4 troubles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:23:12 UTC
From: Garey Barrell
Topic: 12072 Message: 12078

Is the receiver set to EXT MUTE, NB, or CAL?? NOT in ON.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

tjb813 wrote:
> With some guidance from a knowledgable fellow on this list (GArey) I was able to locate the source of the relay "hanging". It was an open diode.
>
> Now that is solved, but there is a newer problem that has now surfaced.
>
> When transmitting I get feedback from the speaker, the receiver acts like it its still active and the receive AGC peggs out. When I un-key, it takes several seconds for the receiver to un-wind. I assume the REC-KEY circuit is still grounded (or shorted to ground via a tube or bypass cap). Plauseable?
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> Other ideas?
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> Yahoo! Groups Links
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12079. Re: [DrakeRadio] have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:28:44 UTC
From: Paul Kraemer
Topic: 12073 Message: 12079

Dale
If you sell out I just received a new 250 ft spool of 8421
50 ft is spoken for but I sure don't need all the rest sitting here
Happy to share any length for 0.68 per foot plus postage cost
I'll even make the cables for anyone looking for that service
Paul K0UYA

----- Original Message -----
From: "dalepavlicek" <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, February 18, 2013 9:12 AM
Subject: [DrakeRadio] have 40 feet of belden 8421

> I Found a guy with 40' of belden 8421 cable the other
> day and bought it. Made a set of INJ and OSC cables and have the rest of
> the remaining cable. If any one in the group is interested in some of the
> cable,would be happy to cut it into the proper 38' LENGTHS and ship it
> out. Iam asking for 4.00 for 2, 37" sections ,mailed. Please get back if
> any interest.
> thanks
> dale wt4t
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> Yahoo! Groups Links
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12080. Re: [DrakeRadio] have 40 feet of belden 8421

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:29:19 UTC
From: yash@aol.com
Topic: 12073 Message: 12080

Paul
thanks,will keep it in mind.
dale wt4t

-----Original Message-----
From: Paul Kraemer <elespe@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Feb 18, 2013 11:26 am
Subject: Re: [DrakeRadio] have 40 feet of belden 8421

Dale
If you sell out I just received a new 250 ft spool of 8421
50 ft is spoken for but I sure don't need all the rest sitting here
Happy to share any length for 0.68 per foot plus postage cost
I'll even make the cables for anyone looking for that service
Paul K0UYA

----- Original Message -----
From: "dalepavlicek" yash@aol.com>
To: DrakeRadio@yahoogroups.com>
Sent: Monday, February 18, 2013 9:12 AM
Subject: [DrakeRadio] have 40 feet of belden 8421

> I Found a guy with 40' of belden 8421 cable the other
> day and bought it. Made a set of INJ and OSC cables and have the rest of
> the remaining cable. If any one in the group is interested in some of the
> cable,would be happy to cut it into the proper 38' LENGTHS and ship it
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> any interest.
> thanks
> dale wt4t
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[Non-text portions of this message have been removed]

12081. Re: [DrakeRadio] Re: Power output T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:35:12 UTC
From: Garey Barrell
Topic: 12053 Message: 12081

Goran -

Great! I 'assumed' since you mentioned the weaktubes that youhad been through the others as well.
Gets me in a lot of trouble! :-)

A touch-up of the alignment is also useful. The compression type trimmer caps are prone to shift
with heat/cool cycles and/or any vibration, especially on the higher bands. I touch them with a
drop of fingernail polish, which seems to help considerably.

The 6JB6's are a LOT tougher than people think, as long as you don't do something stupid. The very
'feature' that made them a popular choice back then, i.e., high plate current with low plate
voltages, makes them VERY easy to overload by being off-resonance. IF you make every effort to keep
the final dipped, and don't spend 15 minutes trying to tune up into the wrong (or NO) antenna, they
will last as long as the popular 'transmitting' tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

sm7dlk wrote:
> Garey,
>
> Thanks a lot for your feedback and explanation, I really appreciate it. Question mark has been straightened. I now understand how the TUNE signal and CW signal are generated by the different methods
>
> This specific T-4XB I have owned since 1972 when I bought it new. It's been resting from time to time but is since 2-3 years in daily use. I did a quick check and found the premixer (V8) weak. Changed the tube and did a light "tune-up". Now exceed 100 watts on all bands. I think I am on the second set of 6JB6A tube on this TX.
>
> 73,Thanks
> Goran SM7DLK
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:

>> Goran -
>>
>> This is normal. It sounds like your PA tubes are pretty tired. Ensure that both arestill working.
>>
>> The TUNE signal and CW signal are generated by entirely different methods.
>>
>> TUNE converts the MIC amp to a ~ 1kHz audio oscillator (also used for SIDETONE). This single tone
>> is applied to the Balanced Modulator to generate a single tone SSB signal. Think whistling into the
>> microphone. The transmit ALC is also active, which is why (with decent PA tubes) the output goes up
>> rapidly to about 130W and 'levels out' even with further increased GAIN adjustment. This is the ALC
>> taking control.
>>
>> CW shifts the Carrier oscillator ~ 900 Hz up into the LSB filter passband. The Balanced Modulator
>> is unbalanced by a DC current, controlled by a second section of the GAIN control, that is applied
>> to the diode ring. This allows the CO signal togo on through the BM with minimal attenuation, and
>> it is then applied to the Mixer and on through the rest of the transmit chain, just like an SSB
>> signal. There is no ALC applied, which is why you can often get more power output in CW than in
>> TUNE. Again, with GOOD PA tubes.!
>>
>> The extreme difference you are seeing is probably an artifact of the lack of PA gain. There WILL be
>> more output available on CW, as explained above, and since the GAIN control has two isolated
>> sections there is no realrelationship between the modes. Some transmitters require more GAIN on CW
>> than others, especially on the higher bands, but most reachnominal output by 1 - 2 o'clock setting
>> of the GAIN control. TUNE will 'flatten out' SSB at about 10 - 11 o'clock.
>>
>> 73, Garey - K4OAH
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> sm7dlk wrote:
>>> My final tubes are probably a bit down, have only abt 75-80 watt out. But this does not concern me since I only need abt. 25 watt to drive my PA. So before looking into a possible replacement of the final tubes I can accept the lower output.

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>>> But it is the following that I need to have explained.
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>>> Say I have 75 watt in TUNE with the Gain set to abt 12 a clock. But in CW and with GAIN in the same position and with key down I have only abt 15 watt. To get 75 watt I have to turn GAIN fully clockwise. It varies between bands. On 80 is almost OK but on 40 and higher I have to turn GAIN fully to get more or less the same output.
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>>> OK. The manual state the following: "Due to different operating condition between TUNE and CW, the power output may be lower in the CW position for a given setting of the GAIN control.
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>>> I probably have to do a complete check-up but before I do, what is that "different operating condition" stated in the manual that causes this huge difference between power output in TUNE and CW?
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>>> Goran SM7DLK
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12082. Re: [DrakeRadio] TR4 troubles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 16:53:44 UTC
From: Garey Barrell
Topic: 12072 Message: 12082

Well, that was a dumb answer! It was right for the twins though.... :-)

There is a RCVR CATH line in the schematic, which grounds multiple points to enable receive.
Obviously those points must be ungrounded to mute the receiver. Tubes involved are V3B, V7, V11 &
V12. A heater-cathode short in any of these tubes could be the problem. Also Pin 5 of the RV-4C
socket under the chassis.

Another possibility is that the two fixed contacts of the relay are too close together,enabling BOTH
the XMTR and RCVR lines at the same time.

You HAVE done Section L. of the alignment, (Neutralization of the IF), right?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

tjb813 wrote:
> With some guidance from a knowledgable fellow on this list (GArey) I was able to locate the source of the relay "hanging". It was an open diode.
>
> Now that is solved, but there is a newer problem that has now surfaced.
>
> When transmitting I get feedback from the speaker, the receiver acts like it its still active and the receive AGC peggs out. When I un-key, it takes several seconds for the receiver to un-wind. I assume the REC-KEY circuit is still grounded (or shorted to ground via a tube or bypass cap). Plauseable?
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> Other ideas?
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12083. Re: TR4 troubles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 18:15:20 UTC
From: tjb813
Topic: 12072 Message: 12083

So you think the grounded cath-key circuit is plauseable? I have to assume its a low impedance path, not a short. Leaky caps have done worse things.

THe relay was replaced with some kind of kit by the previous owner. Relay looks ok, but I tried a different one anyway. No JOy.

The easy path would be to swap V3,7, 11, 12 one at a time with working TR4. If that doesn't locate the problem , then time to start looking for a leaky bypass cap.

Well, I have a place to start now. The fun is in looking for the problem, the joy in finding it!

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Well, that was a dumb answer! It was right for the twins though.... :-)
>
> There is a RCVR CATH line in the schematic, which grounds multiple points to enable receive.
> Obviously those points must be ungrounded to mute the receiver. Tubes involved are V3B, V7, V11 &
> V12. A heater-cathode short in any of these tubes could be the problem. Also Pin 5 of the RV-4C
> socket under the chassis.
>
> Another possibility is that the two fixed contacts of the relay are too close together,enabling BOTH
> the XMTR and RCVR lines at the same time.
>
> You HAVE done Section L. of the alignment, (Neutralization of the IF), right?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> tjb813 wrote:
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> > When transmitting I get feedback from the speaker, the receiver acts like it its still active and the receive AGC peggs out. When I un-key, it takes several seconds for the receiver to un-wind. I assume the REC-KEY circuit is still grounded (or shorted to ground

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> >
> > Other ideas?
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12084. Re: [DrakeRadio] Re: TR4 troubles

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 18:27:30 UTC
From: Garey Barrell
Topic: 12072 Message: 12084

Have you checked the relay wiring?? The Receive / Transmit function is controlled by a single SPDT
pole of the relay. The 'arm' is grounded, and in Receive (unenergized) the Normally Closed (top)
contact is grounded and grounds the RCVR CATH line. In Transmit, (energized,) the Normally Open
(bottom) contact is grounded, keying the XMTR CATH line. It really does need almost a dead short.

The bypass caps on these lines are disc ceramics, which are not prone to shorting. Possible, but
not likely.

Have you checked the IF Neutralization??

Which diode was blown??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

tjb813 wrote:
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> THe relay was replaced with some kind of kit by the previous owner. Relay looks ok, but I tried a different one anyway. No JOy.
>
> The easy path would be to swap V3,7, 11, 12 one at a time with working TR4. If that doesn't locate the problem , then time to start looking for a leaky bypass cap.
>
> Well, I have a place to start now. The fun is in looking for the problem, the joy in finding it!
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Well, that was a dumb answer! It was right for the twins though.... :-)
>>
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>> Obviously those points must be ungrounded to mute the receiver. Tubes involved are V3B, V7, V11 &

>> V12. A heater-cathode short in any of these tubes could be the problem. Also Pin 5 of the RV-4C
>> socket under the chassis.
>>
>> Another possibility is that the two fixed contacts of the relay are too close together,enabling BOTH
>> the XMTR and RCVR lines at the same time.
>>
>> You HAVE done Section L. of the alignment, (Neutralization of the IF), right?
>>
>> 73, Garey - K4OAH
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> tjb813 wrote:
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>>> Other ideas?
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12085. Re: [DrakeRadio] Re: Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 19:09:43 UTC
From: Mark Pilant
Topic: 11909 Message: 12085

Matt, Garey, thank you for the eyes :-)

The PTT line makes sense, as one of the lines to the "extra" relay was where the PTT line was supposed to go. I just finished soldering the PTT line back to where it was supposed to be.

I just have a couple of more connections to figure out/undo (related to the VOX relay contacts [5 and 8] of J3), and then all the wiring should be back to normal. Then, maybe, I can hook it up to my signal generator and dummy load and try to actually to an alignment.

73

- Mark N1VQW

12086. Re: [DrakeRadio] Re: Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 19:14:22 UTC
From: Mark Pilant
Topic: 12036 Message: 12086

Regarding Deoxit, be aware there is another contact cleaner called
De-Ox-Id, with a spray can similar in style to Deoxit. It appears
to be "made" by GC Electronics.

I don't know how it compares, but I thought folks should be know
about it to avoid possible confusion.

73

- Mark N1VQW

12087. Re: [DrakeRadio] Re: Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 19:41:39 UTC
From: Garey Barrell
Topic: 11909 Message: 12087

Mark -

Cool.

Pins 5 and 8 go only to a set of Normally Open relay contacts. There is no Normally Closed contact
function. The original relay HAD no upper contact!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
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> was where the PTT line was supposed to go. I just finished soldering
> the PTT line back to where it was supposed to be.
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> I just have a couple of more connections to figure out/undo (related
> to the VOX relay contacts [5 and 8] of J3), and then all the wiring
> should be back to normal. Then, maybe, I can hook it up to my signal
> generator and dummy load and try to actually to an alignment.
>
> 73
>
> - Mark N1VQW
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12088. Re: [DrakeRadio] Re: Bringing my TR-4 back to life... need to know where a wire goes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 20:07:42 UTC
From: Mark Pilant
Topic: 11909 Message: 12088

Hi Garey.

> Pins 5 and 8 go only to a set of Normally Open relay contacts.

Yep. It appears as though pins 5 and 8 on J3 have had some "work".
One of them now has no connection, and the other is going to take
a bit of manipulation to figure out what, if anything, is connected.
(It is sort of buried under some disc caps.)

I know there was work because of the stubs of cut off wires, and
the tell-tale signs of soldering... melted insulation :-)

Garey, I also want to thank you for all the work you did on the
CDs. Having high resolution pictures I could really zoom in on
made some of my task a great deal easier.

73

- Mark N1VQW

12089. Re: [DrakeRadio] Re: Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 20:15:47 UTC
From: john garko
Topic: 12036 Message: 12089

Mark, thank you for the info. I checked my can and it is 'ID' .. not 'iT'
... Is this not as good as the other? Any comments?

John
WA4KWK

On Mon, Feb 18, 2013 at 2:14 PM, Mark Pilant <n1vqw@...> wrote:

> **
>
>
> Regarding Deoxit, be aware there is another contact cleaner called
> De-Ox-Id, with a spray can similar in style to Deoxit. It appears
> to be "made" by GC Electronics.
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> I don't know how it compares, but I thought folks should be know
> about it to avoid possible confusion.
>
> 73
>
> - Mark N1VQW
>
>

[Non-text portions of this message have been removed]

12090. Re: [DrakeRadio] Bringing my TR-4 back to life... PO modifications undone

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-18 22:07:38 UTC
From: Mark Pilant
Topic: 11909 Message: 12090

Well it looks as though I have undone the last (I hope) of the PO modifications. It turns out the last one was fairly easy to undo.

As part of the other modifications, the PO had cut the wire going to J3-5, thus disabling the VOX relay. While the wire had been cut just about at the bundle, there was enough left (after taking the wire out of the bundle) to re-attach to J3-5.

Not really a modification, but it appears sometime along the way, the MIC jack was replaced with a jack for a standard 1/4" plug. While not real high on my list, I'm going to try and see if I can get a suitable replacement back to the original size.

Now to start planning the alignment :-)

Thank you for all the help.

73

- Mark N1VQW

12091. Drake Receiver R4, R4A, B, C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 05:18:05 UTC
From: Wayne Skiba
Topic: 12091 Message: 12091

Hi Group Members:
I am in the market for a Drake receiver either a R4 or R4A, B, or C in good electrical and cosmetic condition with no issues. If you have one that you would be willing to sell please e-mail me at: trapp7318@yahoo.com with your price and some pictures,
Thank you
Wayne
wd9hkp

[Non-text portions of this message have been removed]

12092. New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 05:07:53 UTC
From: trapp7318
Topic: 12092 Message: 12092

Hi All:
I have just joined the Drake Users group, my name is Wayne and I have been a ham since 1974. I currently hold an advanced license and my call is wd9hkp.
I enjoy operating vintage ham gear such as Drake equipment.
I am in the market for a Drake receiver: I am looking for a Drake R4, or an R4A,B,C in good electrical and cosmetic condition with no issues.
If anyone in the group has one that they would like to sell, please e-mail me at: trapp7318@..., with your price and some pictures.
Thank you and best 73's
Wayne
wd9hkp

12093. RE: [DrakeRadio] Re: Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 09:21:21 UTC
From: Ian Reeve
Topic: 12036 Message: 12093

I use Deoxit made by Caig Labs Inc.
There certainly is another product which can be googled De Ox Id or DE-OX-ID which is a different product from a different manufacturer.

Both seem to be on sale from Amazon amongst others, but deoxit is top dollar IMHO

73

Ian
UK

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: n1vqw@...
Date: Mon, 18 Feb 2013 14:14:22 -0500
Subject: Re: [DrakeRadio] Re: Drake 4 Series Makeover

Regarding Deoxit, be aware there is another contact cleaner called

De-Ox-Id, with a spray can similar in style to Deoxit. It appears

to be "made" by GC Electronics.

I don't know how it compares, but I thought folks should be know

about it to avoid possible confusion.

73

- Mark N1VQW

[Non-text portions of this message have been removed]

12094. RE: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 09:33:42 UTC
From: Ian Reeve
Topic: 12092 Message: 12094

Hi Wayne,
Welcome to the Group.

I am the proud user of a Drake R4-C which is superb, one corner of the case took a slight battering during its travels from the seller to myself but it is barely noticeable.
Mine is totally original and the only issue is wear to some of the more used RCA jacks on the rear apron, namely the speaker connection

Always a dilema, do you keep as totally original or do you restore or indeed modify.

There are plenty of mods out there to address issues especially with power supply modifications.

I do hope you can find a suitable Drake to enjoy.

73

Ian
Location: Evesham, Central part of the UK

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: trapp7318@...
Date: Tue, 19 Feb 2013 05:07:53 +0000
Subject: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Hi All:

I have just joined the Drake Users group, my name is Wayne and I have been a ham since 1974. I currently hold an advanced license and my call is wd9hkp.

I enjoy operating vintage ham gear such as Drake equipment.

I am in the market for a Drake receiver: I am looking for a Drake R4, or an R4A,B,C in good electrical and cosmetic condition with no issues.

If anyone in the group has one that they would like to sell, please e-mail me at: trapp7318@..., with your price and some pictures.

Thank you and best 73's

Wayne

wd9hkp

[Non-text portions of this message have been removed]

12095. RE: [DrakeRadio] Re: Drake 4 Series Makeover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 09:53:18 UTC
From: Ian Reeve
Topic: 12036 Message: 12095

It is difficult to know if there are other products which are as good as deoxit but less expensive. I would guess there are a lot of near equivalents ou there but personally I find deoxit is by far the best against Servisol and RS contact spray.

I find you only need such a small "squiry" of deoxit so it does go a long way!

Regards

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: daveincaol@...
Date: Mon, 18 Feb 2013 14:54:31 +0000
Subject: [DrakeRadio] Re: Drake 4 Series Makeover

Thanks to all who have responded to my question re restoring Drake 4 chassis. Points taken and being evaluted.

There's mention in a 'sticky' that TR7 problems largely relate to switches, contacts etc. I've also noted that both Deoxit and Cranolin cleaners have been suggested. The price difference is substantial. I know that we get what we pay for (or at least hope to) but is Deoxit worth 4 times as much? Or is Cranolin basically an alcohol solvent mostly good for degeasing.

I ask because there is a TR7 and PS7 in the equipment I've arranged to be tested in three weeks or so and these haven't been used for perhaps ten years.

Regards

Dave

--- In DrakeRadio@yahoogroups.com, Ian Reeve wrote:

>

>

> Please don't use silver polish, it will do more harm than good. A little (really small spray)of deoxit and manipulation will get the contact surfaces as good as new.

>

> As for the copper, leave as is in my opinion. The issue of corrosion is well known and any prospective purchaser would I am sure have their own methods and would rather know it had not been cleaned and buy "as is"

>

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> Ian Reeve M?IDR

>

>

> To: DrakeRadio@yahoogroups.com

> From: daveincaol@...

> Date: Sat, 16 Feb 2013 15:52:39 +0000

> Subject: [DrakeRadio] Drake 4 Series Makeover

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> I've been 'appointed' to sell on items of equipment left behind by GM3XIJ (RIP). Amongst the rigs are 5 pieces of Series 4 system. The 'covered' items appear in good condition although I haven't opened them to check. The ones known to have some internal corrosion on the copper plating are the vented Rx and Tx. Fortunately the corrosion in these is restricted to the upward facing horizontal surfaces, the vertical and under surfaces are bright and new looking.

>

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>

> Because these items are for selling on my intention is to refurbish only the outer covers and apply a bit of silver polish to the sockets if necessary.

>

>

>

> My quandary is how to treat those copper surfaces where rust has broken through. The worst area has 90% rust and the least perhaps 30-40%.

>

> My thoughts are to clean back with a stiff nylon brush. Vacuum any debris and then apply a rust neutraliser.

>

> If at a later date an owner wished to restore to display standard then would this method cause them least trouble getting the metal replated? If there is a better alternative please let me know.

>

>

>

> I don't know if the equipment works as yet. I have made arrangements to take it to the nearest active club who will test it. If it is serviceable I don't think it would be very sensible to do much more than modest restoration. What do you think?

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> [Non-text portions of this message have been removed]

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12096. early r4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 14:29:22 UTC
From: dalepavlicek
Topic: 12096 Message: 12096

Have a 13 tube R4a sn#2484. I have the original R-4a manual. I noticed in the manual the R4a was set up with a TR-4 and nothing was shown for a transceive setup with a t4x. Did the t4x come out later than the R4a? Did Drake ever publish a latter manual showing the hookup with a t4x? Just curious.
thanks
dale wt4t

12097. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 14:41:46 UTC
From: Wayne Skiba
Topic: 12092 Message: 12097

Hi Ian:
Thank you for your warm welcome.
Best 73's
Wayne

From: Ian Reeve <ian.radioworkshop@...>
To: drakeradio@yahoogroups.com
Sent: Tuesday, February 19, 2013 3:33 AM
Subject: RE: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Hi Wayne,
Welcome to the Group.

I am the proud user of a Drake R4-C which is superb, one corner of the case took a slight battering during its travels from the seller to myself but it is barely noticeable.
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There are plenty of mods out there to address issues especially with power supply modifications.

I do hope you can find a suitable Drake to enjoy.

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Ian
Location: Evesham, Central part of the UK

Ian Reeve MØIDR

To: DrakeRadio@yahoogroups.com
From: trapp7318@...
Date: Tue, 19 Feb 2013 05:07:53 +0000
Subject: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Hi All:

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Thank you and best 73's

Wayne

wd9hkp

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12098. Re: [DrakeRadio] early r4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 15:18:57 UTC
From: Garey Barrell
Topic: 12096 Message: 12098

Dale -

The T-4Xcame out with the R-4, or very shortly thereafter. I had one of the first R-4ssold, ordered
before it was 'announced', and I received it almost a month before the T-4X. Obviously they were
designed together. The T-4X came with an AC-3, as the AC-4 was not yet even announced.

The interconnection with the T-4X was described in the T-4X manual! Ya really didn't need it unless
you had a T-4X now, did ya?!? The T-4X manual also showed interconnection with the 2-B, and a
'Linear Amplifier' including an external T-R relay.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dalepavlicek wrote:
> Have a 13 tube R4a sn#2484. I have the original R-4a manual. I noticed in the manual the R4a was set up with a TR-4 and nothing was shown for a transceive setup with a t4x. Did the t4x come out later than the R4a? Did Drake ever publish a latter manual showing the hookup with a t4x? Just curious.
> thanks
> dale wt4t
>
>

12099. Re: [DrakeRadio] early r4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 15:30:43 UTC
From: yash@aol.com
Topic: 12096 Message: 12099

Garey
I was just curious, I have a t4xc and a r4a, just finished the cable set . the calibration setup for my combination, is the exact same as all the other drake twins?
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Feb 19, 2013 10:19 am
Subject: Re: [DrakeRadio] early r4a

Dale -

The T-4Xcame out with the R-4, or very shortly thereafter. I had one of the first R-4ssold, ordered
before it was 'announced', and I received it almost a month before the T-4X. Obviously they were
designed together. The T-4X came with an AC-3, as the AC-4 was not yet even announced.

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>
>

[Non-text portions of this message have been removed]

12100. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 15:46:02 UTC
From: Garey Barrell
Topic: 12092 Message: 12100

Wayne -

Welcome to the group. Here is a little description of the various Drake 4 Series receivers I posted
on the list some time ago. There ARE differences, and you really need at least one of each to form
your own opinion!!! :-)

Feel free to post any questions orcomments to the list.

The 2-B is an outstanding CW receiver, the dial calibration is a little coarse by today's standards,
but for just getting on the air and enjoying a CW QSO it works as well as any. It has three (L-C)
filter bandwidths, (500, 2100 and 3600 Hz,) built in along with passband tuning. The 100 kHz
crystal calibrator was optional. The companion 2-BQ Q Multiplier adds a very sharp peaking filter
and a nice tunable null, both at the IF.

There is no matching transmitter for the 2-B.

The R-4 is almost a 2-B, just with a linear PTO and 1 kHz dial calibration. All tubes. Very similar in operation, and will transceive with the matching T-4X for an excellent CW station.
Fourfilter bandwidths, (400, 1200, 2400 and 4800 Hz,) passband tuning, noise blanker, LC notch and
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level audio stages converted to solid state.

The R-4B (early) is very similar to the late R-4A, minor modifications and crystal calibrator
multivibrator for 25 kHz markers. Several ergonomic
improvements, painted lettering above belt line, tilted knob skirt, PTO in use light.

The R-4B (late) almost identical except PTO changed from bipolar to FET.

The R-4C (early) very similar, except IF filters changed to crystal filters. Only the 2.3 kHz
filter is standard, 250, 500, 1800, 4000 and 6000 Hz BW are available as options. The 4000

& 6000
Hz filters are normally installed in a special socket under the chassis and is effective on AM
only. Four position filter switch. The noise blanker was optional. Entire audio chain solid state, tubes used only from RF to IF, all other stages and oscillators solid state.

The R-4C (late) same. Five position filter switch.

The 2-B through the R-4B used L-C filters in the IF. This type of filter has much gentler slopes,
which means that nearby signals are still heard, just at reduced levels. The crystal filters are
steep sided, more like the crystal filters in today's receivers. Personally, I prefer the L-C
filters for all except heavy duty contest use. I like to hear what is going on around my frequency,
instead of "listening with blinders on"...

The T-4 series transmitters are all pretty much the same, the T-4X had 4 pole crystal filters while
the T-4XB and C had 8 pole filters. The later ones therefore had slightly better carrier and
unwanted sideband suppression, neither of which has ANY effect on CW operation. ANY 4 series
receiver will transceive with ANY 4 series transmitter, mix and match. There are minor things like
the B line had a neon indicator light under the dial to show which PTO was controlling in transceive
while the C line just turned the dial lamps on or off. The R-4 and R-4A had neither, so you had to
look at the switch!

My opinion..... The R-4B is probably the best receiver overall. It has great audio, smooth AGC,
all the filters and noise blanker are built in. The L-C filters are not quite as "drop off the
table" selective, but I prefer that for casual QSOs.

The R-4C has poorer audio, a little harsher, the "better" (?) crystal filters are extra, and the
noise blanker is extra.

The R-4 and R-4A are just earlier iterations of the R-4B, and are not quite as refined, although
some say they prefer the early R-4A to the R-4B because the tube type product detector in the R-4A
is "cleaner".

The 2-B isn't very far behind, except it will NOT transceive with anything, and the dial calibration
is not precisely linear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12101. Re: [DrakeRadio] early r4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 16:17:45 UTC
From: Garey Barrell
Topic: 12096 Message: 12101

Dale -

Yeah, you'll just have a couple of jacks left over on the T-4XC, PTO LAMP and CAR OSC, neither are
supported by theR-4A or B. You'll want a shorted plug in the PTO LAMP to keep the dial lamp on all
the time, otherwise it will only be on in SEPARATE and XMTR Control.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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yash@... wrote:
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> dale wt4t
>
>
>
> -----Original Message-----
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Tue, Feb 19, 2013 10:19 am
> Subject: Re: [DrakeRadio] early r4a
>
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> Dale -
>
> The T-4Xcame out with the R-4, or very shortly thereafter. I had one of the first R-4ssold, ordered
> before it was 'announced', and I received it almost a month before the T-4X. Obviously they were
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>
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> 'Linear Amplifier' including an external T-R relay.

>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
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>> thanks
>> dale wt4t
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> Yahoo! Groups Links
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12102. RE: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 16:24:04 UTC
From: Terrell Hamilton
Topic: 12092 Message: 12102

Garey:

This is a great synopsis! Do you know how the SPR-4 would fit into this ancestral tree?

73

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Tuesday, February 19, 2013 7:46 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Wayne -

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

[Non-text portions of this message have been removed]

12103. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 16:36:42 UTC
From: Wayne Skiba
Topic: 12092 Message: 12103

Hi Garey:
Thank you very much for this fine detailed explanation, I am glad that you took the time to expain the differences, I knew that the R4 line of drake receivers were very good but did not know their differences and which one would be right for me, but I am leaning towards the R4B based on all of my research it seems that other drake owners like that model the best.
Thank you very much.
Wayne

From: Terrell Hamilton <hamilter@...>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, February 19, 2013 10:24 AM
Subject: RE: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

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Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Garey Barrell
Sent: Tuesday, February 19, 2013 7:46 AM
To: mailto:DrakeRadio%40yahoogroups.com
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The 2-B through the R-4B used L-C filters in the IF. This type of filter has much gentler slopes,
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The R-4 and R-4A are just earlier iterations of the R-4B, and are not quite as refined, although
some say they prefer the early R-4A to the R-4B because the tube type product detector in the R-4A
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The 2-B isn't very far behind, except it will NOT transceive with anything, and the dial calibration
is not precisely linear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

[Non-text portions of this message have been removed]

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12104. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 18:49:26 UTC
From: Garey Barrell
Topic: 12092 Message: 12104

Terrell -

I"ve never owned an SPR-4, but the block diagram is essentially identical to the R-4A/B, just
implemented in solid state. The Passband Tuner looks to be just like the 2-C, i.e., no moveable
passband, just four fixed bandwidths.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Garey:
>
>
>
> This is a great synopsis! Do you know how the SPR-4 would fit into this
> ancestral tree?
>
>
>

12105. Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 18:53:47 UTC
From: Al Schichler
Topic: 12050 Message: 12105

Thanks for all the info.

I don't have any pieces of glass on hand, but I do have some small pieces of wood that are very flat and smooth, and about an inch thick. I was thinking of clamping the plastic dial scale between those and putting in an oven for a couple hours. I think I can get it to stay around 125 degrees. I don't know if that would be too hot or not. Any thoughts?

thanks,
Al

12106. Re: New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 19:05:40 UTC
From: Al Schichler
Topic: 12092 Message: 12106

I don't know if you are still interested on an R-4A at all, but I I have a nice one that has been all refurbished and aligned within the last year. The front panel is close to perfect and the cabinet is very nice, with very few noticeable scratches or blemishes. It does have some of the usual spotting on top of the copper chassis, but less than average in my opinion.
It works great on all bands, with no issues. I wasn't planning to sell it quite this soon, but if I get a good offer, I will certainly think about it.

73,
Al, WA2S

12107. FS: Drake

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 19:20:20 UTC
From: Garey Barrell
Topic: 12107 Message: 12107

The following is from a good friend of mine in Atlanta. Contact him if interested.
--
73, Garey - K4OAH
Glen Allen, VA

I am helping to dispose of some amateur radio equipment for an estate located in Atlanta, GA.
If you have an interest in any of this equipment let me know and I will provide you with more
details. I have not had time to check any of it out and can send some pictures of it. I would
recommend you go to www.rigpix.com to get some detailed information one each.

I will not have it picked up or checked out prior to upcoming Dalton Hamfest and will not be
bring any of it to that hamfest. Some of the smaller items can be shipped but I would prefer
pickup either at my home or at the home of the widow who lives in the Buckhead area of Atlanta.

Tom Koch - W4UOC
404-314-6109
w4uoc@...

Mfg Type Model Listing Price

Drake Antenna Tuner MN-2000 $214.00
Drake Receiver R4-C $344.00
Drake Transmitter T-4X $166.00
Drake P/S Speaker MS-4 $70.00
Drake Transmitter TR-3 $201.00

12108. Re: [DrakeRadio] Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 19:20:43 UTC
From: Barry
Topic: 12050 Message: 12108

Unless the wood is very, very smooth, I would be concerned about transferring grain patterns to the softened plastic. It might not do that, but if it did, it would be pretty hard to undo.

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Al Schichler" <aschichler@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, February 19, 2013 12:53:47 PM
> Subject: [DrakeRadio] Re: Drake R-4A, R-4B, or T-4X plastic dial scale
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> Thanks for all the info.
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> putting in an oven for a couple hours. I think I can get it to stay
> around 125 degrees. I don't know if that would be too hot or not.
> Any thoughts?
>
> thanks,
> Al

12109. looking for a t4x series transmitter.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 22:28:12 UTC
From: yash@aol.com
Topic: 12109 Message: 12109

Looking for a T4X .. any version, transmitter. Cosmetics not important,but being operational is. Will consider all. Please get back off the list. can do pay pal+ or postal MO. do not need power supply.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12110. Re: [DrakeRadio] Re: New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 00:04:17 UTC
From: Wayne Skiba
Topic: 12092 Message: 12110

Hi Al:
Yes I would be interested in the R4A, as a matter of fact I would prefer to get either an R4 or RA or R4B, what would you be asking for it? Could you send some pictures?
Thank you
Wayne

From: Al Schichler <aschichler@...>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, February 19, 2013 1:05 PM
Subject: [DrakeRadio] Re: New Member and a drake Receiver R4, R4A, B, C.

I don't know if you are still interested on an R-4A at all, but I I have a nice one that has been all refurbished and aligned within the last year. The front panel is close to perfect and the cabinet is very nice, with very few noticeable scratches or blemishes. It does have some of the usual spotting on top of the copper chassis, but less than average in my opinion.
It works great on all bands, with no issues. I wasn't planning to sell it quite this soon, but if I get a good offer, I will certainly think about it.

73,
Al, WA2S

[Non-text portions of this message have been removed]

12111. Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 00:13:19 UTC
From: Robert Nohren
Topic: 12050 Message: 12111

I remember bending some plastic after dipping it in some boiling water. I don't remember times or temperatures so you'll have to do the old empirical. (trial and error)

Bob N4IBK

12112. Station for Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 00:15:37 UTC
From: gldinnc
Topic: 12112 Message: 12112

I have listed my R-4C, T-4XC, MS-4 and AC-4 for auction. I am not sure that I have them in the correct auction category, but they are out there somewhere.

Gordon, KA2NLM

12113. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 00:21:46 UTC
From: Steve Wedge
Topic: 12092 Message: 12113

Garey -

Wasn't the reduction drive for the PRESELECTOR also a difference between the R-4 and all subsequent versions?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, February 19, 2013 10:46 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Wayne -

Welcome to the group. Here is a little description of the various Drake 4 Series receivers I posted
on the list some time ago. There ARE differences, and you really need at least one of each to form
your own opinion!!! :-)

Feel free to post any questions orcomments to the list.

The 2-B is an outstanding CW receiver, the dial calibration is a little coarse by today's standards,
but for just getting on the air and enjoying a CW QSO it works as well as any. It has three (L-C)
filter bandwidths, (500, 2100 and 3600 Hz,) built in along with passband tuning. The 100 kHz
crystal calibrator was optional. The companion 2-BQ Q Multiplier adds a very sharp peaking filter
and a nice tunable null, both at the IF.

There is no matching transmitter for the 2-B.

The R-4 is almost a 2-B, just with a linear PTO and 1 kHz dial calibration. All tubes. Very similar in operation, and will transceive with the matching T-4X for an excellent CW station.
Fourfilter bandwidths, (400, 1200, 2400 and 4800 Hz,) passband tuning, noise blanker, LC notch and
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Oscillators converted to solid state.

The R-4A (late 11 tube model) almost identical specifications. Product detector, BFO, AGC and low
level audio stages converted to solid state.

The R-4B (early) is very similar to the late R-4A, minor modifications and crystal calibrator
multivibrator for 25 kHz markers. Several ergonomic
improvements, painted lettering above belt line, tilted knob skirt, PTO in use light.

The R-4B (late) almost identical except PTO changed from bipolar to FET.

The R-4C (early) very similar, except IF filters changed to crystal filters. Only the 2.3 kHz
filter is standard, 250, 500, 1800, 4000 and 6000 Hz BW are available as options. The 4000 & 6000
Hz filters are normally installed in a special socket under the chassis and is effective on AM
only. Four position filter switch. The noise blanker was optional. Entire audio chain solid state, tubes used only from RF to IF, all other stages and oscillators solid state.

The R-4C (late) same. Five position filter switch.

The 2-B through the R-4B used L-C filters in the IF. This type of filter has much gentler slopes,
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steep sided, more like the crystal filters in today's receivers. Personally, I prefer the L-C
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The 2-B isn't very far behind, except it will NOT transceive with anything, and the dial calibration
is not precisely linear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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[Non-text portions of this message have been removed]

12114. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 00:23:30 UTC
From: Steve Wedge
Topic: 12092 Message: 12114

The SPR-4 was contemporary with the C-Line and uses the same PTO. Mid-to-late 1970's.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terrell Hamilton
Sent: Tuesday, February 19, 2013 11:24 AM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Garey:

This is a great synopsis! Do you know how the SPR-4 would fit into this
ancestral tree?

73

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
Behalf Of Garey Barrell
Sent: Tuesday, February 19, 2013 7:46 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Wayne -

Welcome to the group. Here is a little description of the various Drake 4
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[Non-text portions of this message have been removed]

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12115. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 03:21:08 UTC
From: Garey Barrell
Topic: 12092 Message: 12115

Steve -

Yes, you're correct. As did the RF TUNE on the very early T-4X. They both just had the same bar
knob as all the other controls.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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12116. FOR SALE.....2 - DRAKE WH-7 WATTMETERS Real Nice!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-19 15:56:12 UTC
From: Robert Ross
Topic: 12116 Message: 12116

Hi Guys:

I have FOR SALE..... TWO (2), DRAKE WH-7 Wattmeters. They are described below. Both of them are Real Nice and I would grade them a 9 out of 10, and Real Clean.....Non Smoking Home.

Both have been used by me with a Pair of Drake TR-7's, and they work Fine. They still have the Original Drake Tags attached showing Serial Number and Date of Manufacture. These are both the NICE PAINT Version...NOT the Sticky Paint Model. No Damage and have been looked after!!!

3 Power levels 20/200/2000 Watts and VSWR

These are Nice Units.....

They are Described Below.

PRICES are in USA DOLLARS and PAYABLE by USPS Int'l Money Order (The Pink Coloured One), or Personal Check Only.

SORRY NO PAYPAL
****

Please email me directly at..... va3sw@... to reserve either of these Units.

POSTAGE is EXTRA. Shipping ONLY to NORTH AMERICA.
****

73...ROB VA3SW

Robert S. Ross
London, Ontario CANADA

****
****
UNIT # 1 DRAKE WH-7 WATTMETER
SERIAL Number 3407 April/28/1980

CONDITION is.....EXCELLENT and CLEAN No Damage

PRICE is.....$125.00 USA Dollars + $20.00 AIRMAIL to NORTH AMERICA
****
****
UNIT # 2 DRAKE WH-7 WATTMETER
SERIAL # 3547 May/02/1990

CONDITION is.....EXCELLENT and CLEAN No Damage

PRICE is.....$125.00 USA Dollars + $20.00 AIRMAIL to NORTH AMERICA
****
****

12117. New Member into and Q's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 06:53:06 UTC
From: zl1bbw
Topic: 12117 Message: 12117

ZL1BBW was ZL1DAB prior to that G3YCP.

Two drake sets R4B T4XB MS4 & R4C T4XC MS4 MN4.

Just getting back on the air after a long period of inactivity, so using the standbi rig a TS530.

Revamping the linear/s both of them are 2x 4-400 in GG will be installing the W7RY qsk boards into them and giving them a general overhaul.

Two problems with the Drake twins.....

T4XB turned it on and a quiet psst from the back left hand corner, still got standing bias and sidetone, but no drive, before I dive in there any standard problems to look for?

R4C... the crystal calibrator does not work, get a speaker click when I turn to cal but no cal signal anywhere, any standard problems on the board is it just a case of checking it through?

Thanks Gavin

12118. Re: TR4 troubles ; Resolved!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 12:36:18 UTC
From: tjb813
Topic: 12072 Message: 12118

It was V11, a 12BA6. Couldn't identify what elements were shorted. But the TR4 is behaving very nicely now.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Have you checked the relay wiring?? The Receive / Transmit function is controlled by a single SPDT
> pole of the relay. The 'arm' is grounded, and in Receive (unenergized) the Normally Closed (top)
> contact is grounded and grounds the RCVR CATH line. In Transmit, (energized,) the Normally Open
> (bottom) contact is grounded, keying the XMTR CATH line. It really does need almost a dead short.
>
> The bypass caps on these lines are disc ceramics, which are not prone to shorting. Possible, but
> not likely.
>
> Have you checked the IF Neutralization??
>
> Which diode was blown??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> tjb813 wrote:
> > So you think the grounded cath-key circuit is plauseable? I have to assume its a low impedance path, not a short. Leaky caps have done worse things.
> >
> > THe relay was replaced with some kind of kit by the previous owner. Relay looks ok, but I tried a different one anyway. No JOy.
> >
> > The easy path would be to swap V3,7, 11, 12 one at a time with working TR4. If that doesn't locate the problem , then time to start looking for a leaky bypass cap.
> >
> > Well, I have a place to start now. The fun is in looking for the problem, the joy in finding it!
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:

> >> Well, that was a dumb answer! It was right for the twins though.... :-)
> >>
> >> There is a RCVR CATH line in the schematic, which grounds multiple points to enable receive.
> >> Obviously those points must be ungrounded to mute the receiver. Tubes involved are V3B, V7, V11 &
> >> V12. A heater-cathode short in any of these tubes could be the problem. Also Pin 5 of the RV-4C
> >> socket under the chassis.
> >>
> >> Another possibility is that the two fixed contacts of the relay are too close together,enabling BOTH
> >> the XMTR and RCVR lines at the same time.
> >>
> >> You HAVE done Section L. of the alignment, (Neutralization of the IF), right?
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> tjb813 wrote:
> >>> With some guidance from a knowledgable fellow on this list (GArey) I was able to locate the source of the relay "hanging". It was an open diode.
> >>>
> >>> Now that is solved, but there is a newer problem that has now surfaced.
> >>>
> >>> When transmitting I get feedback from the speaker, the receiver acts like it its still active and the receive AGC peggs out. When I un-key, it takes several seconds for the receiver to un-wind. I assume the REC-KEY circuit is still grounded (or shorted to ground via a tube or bypass cap). Plauseable?
> >>>
> >>> Other ideas?
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12119. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 14:15:22 UTC
From: Steve Wedge
Topic: 12092 Message: 12119

That would be a pretty rare T-4X, I reckon and I should snap any up that I see - even though they'll not be as easy to tune. Have to admit, though, that I've never seen one.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, February 19, 2013 10:21 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Steve -

Yes, you're correct. As did the RF TUNE on the very early T-4X. They both just had the same bar
knob as all the other controls.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Steve Wedge wrote:
> Garey -
>
> Wasn't the reduction drive for the PRESELECTOR also a difference between the R-4 and all subsequent versions?
>
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
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>
>
>
> From: Garey Barrell
> Sent: Tuesday, February 19, 2013 10:46 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.
>

>
>
> Wayne -
>
> Welcome to the group. Here is a little description of the various Drake 4 Series receivers I posted
> on the list some time ago. There ARE differences, and you really need at least one of each to form
> your own opinion!!! :-)
>
> Feel free to post any questions orcomments to the list.
>
> The 2-B is an outstanding CW receiver, the dial calibration is a little coarse by today's standards,
> but for just getting on the air and enjoying a CW QSO it works as well as any. It has three (L-C)
> filter bandwidths, (500, 2100 and 3600 Hz,) built in along with passband tuning. The 100 kHz
> crystal calibrator was optional. The companion 2-BQ Q Multiplier adds a very sharp peaking filter
> and a nice tunable null, both at the IF.
>
> There is no matching transmitter for the 2-B.
>
> The R-4 is almost a 2-B, just with a linear PTO and 1 kHz dial calibration. All tubes. Very
> similar in operation, and will transceive with the matching T-4X for an excellent CW station.
> Fourfilter bandwidths, (400, 1200, 2400 and 4800 Hz,) passband tuning, noise blanker, LC notch and
> 100 kHz crystal calibrator built in.
>
> The R-4A (early 13 tube model) is an improved R-4, almost identical specifications. PTO and Band
> Oscillators converted to solid state.
>
> The R-4A (late 11 tube model) almost identical specifications. Product detector, BFO, AGC and low
> level audio stages converted to solid state.
>
> The R-4B (early) is very similar to the late R-4A, minor modifications and crystal calibrator
> multivibrator for 25 kHz markers. Several ergonomic
> improvements, painted lettering above belt line, tilted knob skirt, PTO in use light.
>
> The R-4B (late) almost identical except PTO changed from bipolar to FET.
>
> The R-4C (early) very similar, except IF filters changed to crystal filters. Only the 2.3 kHz
> filter is standard, 250, 500, 1800, 4000 and 6000 Hz BW are available as options. The

4000 & 6000
> Hz filters are normally installed in a special socket under the chassis and is effective on AM
> only. Four position filter switch. The noise blanker was optional. Entire audio chain solid
> state, tubes used only from RF to IF, all other stages and oscillators solid state.
>
> The R-4C (late) same. Five position filter switch.
>
> The 2-B through the R-4B used L-C filters in the IF. This type of filter has much gentler slopes,
> which means that nearby signals are still heard, just at reduced levels. The crystal filters are
> steep sided, more like the crystal filters in today's receivers. Personally, I prefer the L-C
> filters for all except heavy duty contest use. I like to hear what is going on around my frequency,
> instead of "listening with blinders on"...
>
> The T-4 series transmitters are all pretty much the same, the T-4X had 4 pole crystal filters while
> the T-4XB and C had 8 pole filters. The later ones therefore had slightly better carrier and
> unwanted sideband suppression, neither of which has ANY effect on CW operation. ANY 4 series
> receiver will transceive with ANY 4 series transmitter, mix and match. There are minor things like
> the B line had a neon indicator light under the dial to show which PTO was controlling in transceive
> while the C line just turned the dial lamps on or off. The R-4 and R-4A had neither, so you had to
> look at the switch!
>
> My opinion..... The R-4B is probably the best receiver overall. It has great audio, smooth AGC,
> all the filters and noise blanker are built in. The L-C filters are not quite as "drop off the
> table" selective, but I prefer that for casual QSOs.
>
> The R-4C has poorer audio, a little harsher, the "better" (?) crystal filters are extra, and the
> noise blanker is extra.
>
> The R-4 and R-4A are just earlier iterations of the R-4B, and are not quite as refined, although
> some say they prefer the early R-4A to the R-4B because the tube type product detector in the R-4A
> is "cleaner".
>
> The 2-B isn't very far behind, except it will NOT transceive with anything, and the dial calibration

> is not precisely linear.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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12120. Making new Plastic Dial Scales for the Drake 4.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 15:24:30 UTC
From: sm7dlk
Topic: 12120 Message: 12120

I just want to share some ideas how to make new dials.

I have seen many discolored plastic dials on Drake 4. The last one I saw was so ugly that it was difficult to read. I don't know why some dials does not have the slightest trace of discoloration while others are very ugly. Maybe some old dials can resist UV-radiation and others not. I like to experiment and read below what I have done. I am very satisfied with my result. There are companies on the market who can to make dials but the cost will be high.

How I have done:
First I produced an image of the original dial, in this case a dial from a T-4XB.
The image was printed on transparent film for OHP.
The film was placed between two thin transparent plastic discs cut to the same diameter as the original dial. I used two of these transparent CD-discs which you get for free when buying a pack of CD or DVD. The thicker edge or rim at the center of the plastic disc must be grinded off to make thickness even. Avoid scratch the plastic. The film is placed between the two discs. The clip on the shaft will hold them together. This method is OK to use on Drake 4 with a single dial. Looks like a brand new dial when installed..

I have also tried the "transfer method". Same method as we use for making PCBs using an iron. This is however a time consuming method. The dial-picture was printed on glossy paper and an iron was used to heat and transfer the picture. This method will work as well but be prepared to fail before finding the correct heating time. I used less than 10 seconds with high pressure during my experiments. There is plenty of information on the Net for this technique.

The transparent film is a bit flimsy that's why I used two discs above. I didn't try the film on a single plastic disc and gluing it to the area that is not visible. But this is probably the best and simplest way to make dials.

I did all my experiments with plastic from clear CD discs. This material is very brittle to handle but it was what I had available.
There is a picture on the dial for the T4XB in the my Photo directory

See the above as an input to your own experiments.

73 Goran SM7DLK

12121. WTB - W4 wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 15:32:12 UTC
From: Terrell Hamilton
Topic: 12121 Message: 12121

Does anyone have a W4 wattmeter that they would sell me?

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

12122. Re: New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 15:32:46 UTC
From: Al Schichler
Topic: 12092 Message: 12122

I'll take some pictures of it soon and send them out. Looks like there are a couple people interested, so I'll have to sell it to the person with the best offer. (I would like to get at least $200 for it, preferably a bit more.) I paid more than that for it and put in quite a bit of work cleaning and lubing, repairing a couple problems, and doing a complete alignment on it.
It works beautifully, which is more than I can say about any piece of equipment I ever bought used.

73,
Al, WA2S

12123. Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 16:37:17 UTC
From: Garey Barrell
Topic: 12092 Message: 12123

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
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> Sent: Tuesday, February 19, 2013 10:21 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] New Member and a drake Receiver R4, R4A, B, C.
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>
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>>
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>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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12124. Re: [DrakeRadio] Re: New Member and a drake Receiver R4, R4A, B, C.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 17:19:00 UTC
From: Wayne Skiba
Topic: 12092 Message: 12124

Hi Al:
Thank you for your response, I would give you the $200.00 for it, I do have a budget and I would go up to $250.00 plus shipping, I am very interested i it.
Thank you
Wayne

From: Al Schichler <aschichler@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 20, 2013 9:32 AM
Subject: [DrakeRadio] Re: New Member and a drake Receiver R4, R4A, B, C.

I'll take some pictures of it soon and send them out. Looks like there are a couple people interested, so I'll have to sell it to the person with the best offer. (I would like to get at least $200 for it, preferably a bit more.) I paid more than that for it and put in quite a bit of work cleaning and lubing, repairing a couple problems, and doing a complete alignment on it.
It works beautifully, which is more than I can say about any piece of equipment I ever bought used.

73,
Al, WA2S

[Non-text portions of this message have been removed]

12125. New member and 2B questions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 17:20:01 UTC
From: woooey
Topic: 12125 Message: 12125

Thanks Garey for pointing me to this group.

I am the second owner of a 2B/2A-Q in reasonable condition.
Electrical performance is excellent. There are a few
things that I'd like to improve:

- the dial pointer sticks occasionally (but seemingly
only when in the case, hi)
- the upper chassis surface is dusty and lightly pitted
- the switches are a little noisy (electrically)

I plan to replace the electrolytics sometime. Any other
measures I should take to preserve this nice radio?

73, ian K3IMW

12126. Re: [DrakeRadio] New member and 2B questions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 19:49:53 UTC
From: Garey Barrell
Topic: 12125 Message: 12126

HI Ian -

Welcome to the group!

The 2-B is a terrific little receiver, LOTS of them still in service, and quite a few users in the
group.

The sticking dial pointer MAY be the result of panel/chassis tension created when cabinet screws are
tightened. Can be frustrating, perhaps someone else will have a direct idea.

Absolutely the first thing you should do is be sure there is a 0.6A fuse in the holder. I haveseen
scary things in there, and especially if you do not immediately replace the electrolytic, the
correct fuse may save you a power transformer.

The electrolytic is about 40 years past it's expected life, so ..... That said, there are hundreds,
perhaps thousands, of 2-Bs out there with the original Twist-Lok in place. You're aware of
Hayseedhamfest, and Tom can resolve that problem when you are ready. The film capacitors Drake used
are quite reliable, and I have yet to see a leaky one that hadn't been burned, melted, dented, etc.,
earlier.

The 8BN8 IS the correct tube. See my article at
<http://www.wb4hfn.com/DRAKE/DrakeArticles/Why_8BN8-2B.htm>

There were four versions of the schematic, most for changes to the AVC circuitry. You might want to
take a look at my CD for the 2-B if you're going to do much with it. It contains all four
schematics, high resolution color photos of theunderchassis, with components annotated and keyed to
a parts list. Samples at k4oah.com.

Donnie, at 2bradioparts.com has a nice selection of cosmetic and repair parts for the 2-B.

Again, welcome, let us know if we can help!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

woooey wrote:
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>
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> Electrical performance is excellent. There are a few
> things that I'd like to improve:
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> - the dial pointer sticks occasionally (but seemingly
> only when in the case, hi)
> - the upper chassis surface is dusty and lightly pitted
> - the switches are a little noisy (electrically)
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>
> 73, ian K3IMW
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12127. Re: [DrakeRadio] New member and 2B questions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 20:37:36 UTC
From: Wes Bolin
Topic: 12125 Message: 12127

Hello Ian
I also own a 2B that just finished "restoration". I can recommend a few things that helped me through the process:
1. Purchase Garey's CD..it really helps
2. Purchase the capacitor replacement kit from Donnie. I also bought the dial Noogie, new bulbs, and correct fuses.
3. Also replace the main electrolytic in the p.s. Tom's will give a better look; Donnies will work fine. I used Donnies in my
     2B and Tom's in my SP600.
4. I used Chapstick as lubricant on the dial pointer to have smooth action (no sticktion). Also straightened the shaft of the
    main tuning knob that moves the dial cord (mine was bent).
5. I cleaned the chassis with Simple Green with no problems. You need to let it have ample time to dry before applying power.
    It took nicotine and grime off the chassis. Did a good job on the white panel behind the dial. I did not get it on the dial.
6. I have not found a way to make the chassis look good where the copper is corroded. So I simply bought some copper paint and
    painted over the bad spots. Doesn't look like collector quality but better than before.
7. Check your radio for modifications...mine had a couple so I brought it back to original.
8. Use De-OxIt sparingly on switch contacts...I do not recommend spraying them. And lightly lube other shafts on the chassis.

I didn't want to spend a lot for a calibrator, so I bought a solid state one from the auction site for less than $20.00. Mounted it on a
couple of stand-offs and wired it to the Calibrator socket pins. I used a rectifier and capacitor to get about 9vdc from the filament
AC voltage for its power, and switch it with the front panel switch. Works good for me.

I repainted the cabinet with Krylon Satin black paint and its pretty close to what was originally on it. Cleaned and polished the knobs
and painted 'arrows' with silver model paint.

Alignment with accurate test equipment helps a lot too. And, I put in all new tubes. Hope that you can get some ideas from my
experience. Its a great little receiver when restored.

Wes

From: woooey <ianmwilson73@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, February 20, 2013 11:20 AM
Subject: [DrakeRadio] New member and 2B questions

Thanks Garey for pointing me to this group.

I am the second owner of a 2B/2A-Q in reasonable condition.
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measures I should take to preserve this nice radio?

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Yahoo! Groups Links

[Non-text portions of this message have been removed]

12128. Drake Series 4 Station needs new home and TLC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 20:49:14 UTC
From: daveincaol
Topic: 12128 Message: 12128

The son of GM3XIJ (RIP) has asked me to sell on rigs from his Dad's shack. He had a Drake 4 Station which consists of a T- 4XB S/N 15121G, R-4A S/N 6807B, MN-4 S/N 982, C-4 S/N 327 and a MS-4. He seems to have had power supply difficulties and has made notes re a 'new power supply' which I don't have. The station appears to have been replaced with a TR-7 and P/S which I also have.
The equipment is not in pristine condition. The upper horizontal chassis plating is corroded on both RX and TX. All other surfaces are bright and shiny. All tubes appear to be in position. The cases mostly need a refresh and in places possibly a repaint. The facia, dials and knobs are mostly good, the tens, units and second dials on the C-4 clock are discoloured and the clock is probably the 50c/s version. The exception is the MN-4 which is in very good condition and was likely retained in the shack alongside the new TR-7
I have lots of photos I can upload if someone tells me how or that I can email once I have an address. I can take more from any desired perspective.
If all 5 packages were delivered to the same USA address then the total carriage would be of the order of $170. Separately the carriage would be of the order of $70 each package.
Given the above information and the need for work and restoration I believe they would benefit by being repatriated to where there is an active interest in the equipment. I don't know how much they might be worth and will have to check any offers against completed sales on FeePay.
I would appreciate any advice and comments.
Thanks DaveB GM6WCF

12129. Re: Drake Series 4 Station needs new home and TLC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 20:53:18 UTC
From: daveincaol
Topic: 12128 Message: 12129

Isn't that dreadful it's printed out all the 'instructions' as well. Hope you can make sense of it. So much for the Rich Text Editor --- In DrakeRadio@yahoogroups.com, "daveincaol" wrote: > >
The son of GM3XIJ (RIP) has asked me to > sell on rigs from his Dad's shack. He had a Drake 4 Station which > consists of a T- 4XB S/N 15121G, R-4A S/N 6807B, MN-4 S/N 982, C-4 S/N > 327 and a MS-4. He seems to have had power supply difficulties and has > made notes re a 'new power supply' which I don't have. The station > appears to have been replaced with a TR-7 and P/S which I also > have.
The equipment is not in > pristine condition. The upper horizontal chassis plating is corroded on > both RX and TX. All other surfaces are bright and shiny. All tubes > appear to be in position. The cases mostly need a refresh and in places > possibly a repaint. The facia, dials and knobs are mostly good, the > tens, units and second dials on the C-4 clock are discoloured and the > clock is probably the 50c/s version. The exception is the MN-4 which is > in very good condition and was likely retained in the shack alongside > the new TR-7
I have lots of > photos I can upload if someone tells me how or that I can email once I > have an address. I can take more from any desired > perspective.
If all 5 packages > were delivered to the same USA address then the total carriage would be > of the order of $170. Separately the carriage would be of the order of > $70 each package.
Given the > above information and the need for work and restoration I believe they > would benefit by being repatriated to where there is an active interest > in the equipment. I don't know how much they might be worth and will > have to check any offers against completed sales on > FeePay.
I would appreciate any > advice and comments.
Thanks > DaveB GM6WCF

>

12130. Re: [DrakeRadio] Re: Drake Series 4 Station needs new home and TLC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 20:59:37 UTC
From: Steve Wedge
Topic: 12128 Message: 12130

Actually, Dave, I'm going to predict at least a couple guys on this list who are in the UK and a couple more on the Continent may decide to have a go at these.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: daveincaol
Sent: Wednesday, February 20, 2013 3:53 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Drake Series 4 Station needs new home and TLC

Isn't that dreadful it's printed out all the 'instructions' as well. Hope you can make sense of it. So much for the Rich Text Editor

--- In DrakeRadio@yahoogroups.com, "daveincaol" wrote:
>
>

The son of GM3XIJ (RIP) has asked me to
> sell on rigs from his Dad's shack. He had a Drake 4 Station which
> consists of a T- 4XB S/N 15121G, R-4A S/N 6807B, MN-4 S/N 982, C-4 S/N
> 327 and a MS-4. He seems to have had power supply difficulties and has
> made notes re a 'new power supply' which I don't have. The station
> appears to have been replaced with a TR-7 and P/S which I also
> have.

The equipment is not in
> pristine condition. The upper horizontal chassis plating is corroded on
> both RX and TX. All other surfaces are bright and shiny. All tubes
> appear to be in position. The cases mostly need a refresh and in places
> possibly a repaint. The facia, dials and knobs are mostly good, the
> tens, units and second dials on the C-4 clock are discoloured and the
> clock is probably the 50c/s version. The exception is the MN-4 which is
> in very good condition and was likely retained in the shack alongside
> the new TR-7

I have lots of
> photos I can upload if someone tells me how or that I can email once I
> have an address. I can take more from any desired
> perspective.

If all 5 packages
> were delivered to the same USA address then the total carriage would be
> of the order of $170. Separately the carriage would be of the order of

> $70 each package.

Given the
> above information and the need for work and restoration I believe they
> would benefit by being repatriated to where there is an active interest
> in the equipment. I don't know how much they might be worth and will
> have to check any offers against completed sales on
> FeePay.

I would appreciate any
> advice and comments.

Thanks
> DaveB GM6WCF

>

[Non-text portions of this message have been removed]

12131. Re: [DrakeRadio] Re: Drake Series 4 Station needs new home and TLC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 21:33:39 UTC
From: Geoffrey S. Mendelson
Topic: 12128 Message: 12131

On 02/20/2013 10:53 PM, daveincaol wrote:
>
>
> Isn't that dreadful it's printed out all the 'instructions' as well.
> Hope you can make sense of it. So much for the Rich Text Editor
>

Nope. It's wonderful. :-)

Seriously, this is a Yahoo group and you can set it to send you emails
in plain text or HTML. Your choice. Go to <http://groups.yahoo.com> sign
in, select this group and modify your settings to plain text mail.

73.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
Gung Hay Fat Choy! (May the new year be prosperous).

12132. Re: [DrakeRadio] Re: Drake Series 4 Station needs new home and TLC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-20 22:57:26 UTC
From: Gary Woods
Topic: 12128 Message: 12132

On Wed, 20 Feb 2013 23:33:39 +0200, you wrote:

>Seriously, this is a Yahoo group and you can set it to send you emails
>in plain text or HTML.

While that's true, I'm set for plain text, and I got all the RTF tags
amidst the text, so something didn't parse correctly.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

12133. Off Topic ? - Heathkit Educational Series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 04:08:34 UTC
From: GlenH_KI4FMC
Topic: 12133 Message: 12133

Hello!
This is one of my first posts to any of the Yahoo Groups so please bear with me if I make any mistakes. I am hoping someone can help me.
I am trying to find some of the Heathkit Educational Series books but without any success despite following every lead that Google listed under several categories. The series are:

1) Passive Circuit Design, by Leonard F. Vincent, ISBN 978-0871190208,
Pub. Heathkit-Zenith 1983

2) Digital Circuit Design, Books 1 & 2, by Staugaard and Larsen,
ISBN 978-0871191120, Pub. Heath Company 1986

3) TTL and CMOS Circuits, Pub. Heathkit-Zenith 1987
ISBN 978-0871190017

I have many of the other books / series and this would pretty much complete the ones that I would like to have. I am also trying to "Elmer" several other new hams and soon to be hams. After 35 years since electronics school and 62 years old, the mind isn't as sharp as it used to be. I'm sure several of you can relate to this !!
If anyone has any of these books and would be willing to sell them please let me know.
Thanks in advance !!!, Glen

12134. Re: [DrakeRadio] Off Topic ? - Heathkit Educational Series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 11:29:33 UTC
From: john
Topic: 12133 Message: 12134

Just a suggestion. Have you looked in abebooks.com ?

John K5MO

At 11:08 PM 2/20/2013, GlenH_KI4FMC wrote:
>Hello!
>This is one of my first posts to any of the Yahoo Groups so please bear
>with me if I make any mistakes. I am hoping someone can help me.
>I am trying to find some of the Heathkit Educational Series books but
>without any success despite following every lead that Google listed under
>several categories. The series are:
>
>1) Passive Circuit Design, by Leonard F. Vincent, ISBN 978-0871190208,
> Pub. Heathkit-Zenith 1983
>
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> ISBN 978-0871191120, Pub. Heath Company 1986
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>3) TTL and CMOS Circuits, Pub. Heathkit-Zenith 1987
> ISBN 978-0871190017
>
>I have many of the other books / series and this would pretty much
>complete the ones that I would like to have. I am also trying to "Elmer"
>several other new hams and soon to be hams. After 35 years since
>electronics school and 62 years old, the mind isn't as sharp as it used to
>be. I'm sure several of you can relate to this !!
>If anyone has any of these books and would be willing to sell them please
>let me know.
>Thanks in advance !!!, Glen
>
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>
>Yahoo! Groups Links
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>

12135. George Graulich

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 11:55:03 UTC
From: George Graulich
Topic: 12135 Message: 12135

http://www.iq-technologie.at/llnllph/i0j5n7e7a3i8/

George Graulich

[Non-text portions of this message have been removed]

12136. Re: [DrakeRadio] Off Topic ? - Heathkit Educational Series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 13:53:22 UTC
From: Robert Logan
Topic: 12133 Message: 12136

Check on Amazon. I just did under under the author's name and found the first book for $2.41. The others will be there too. Sometimes they are unavailable; then they become available. That's the nature of used books on Amazon.

It's a great resource for used and out of print books. It's amazing what you can find. Bob, NZ5A

Sent from my iPhone

On Feb 20, 2013, at 10:08 PM, "GlenH_KI4FMC" <gmhackney@...> wrote:

Hello!
This is one of my first posts to any of the Yahoo Groups so please bear with me if I make any mistakes. I am hoping someone can help me.
I am trying to find some of the Heathkit Educational Series books but without any success despite following every lead that Google listed under several categories. The series are:

1) Passive Circuit Design, by Leonard F. Vincent, ISBN 978-0871190208,
Pub. Heathkit-Zenith 1983

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ISBN 978-0871191120, Pub. Heath Company 1986

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I have many of the other books / series and this would pretty much complete the ones that I would like to have. I am also trying to "Elmer" several other new hams and soon to be hams. After 35 years since electronics school and 62 years old, the mind isn't as sharp as it used to be. I'm sure several of you can relate to this !!
If anyone has any of these books and would be willing to sell them please let me know.
Thanks in advance !!!, Glen

[Non-text portions of this message have been removed]

12137. Re: [DrakeRadio] Off Topic ? - Heathkit Educational Series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 13:57:08 UTC
From: Robert Logan
Topic: 12133 Message: 12137

Check Amazon under the author's name. Your first book is there for $2.41. The others will be there too. It's a great resource for used and out of print books. Bob, NZ5A

Sent from my iPhone

On Feb 20, 2013, at 10:08 PM, "GlenH_KI4FMC" <gmhackney@...> wrote:

Hello!
This is one of my first posts to any of the Yahoo Groups so please bear with me if I make any mistakes. I am hoping someone can help me.
I am trying to find some of the Heathkit Educational Series books but without any success despite following every lead that Google listed under several categories. The series are:

1) Passive Circuit Design, by Leonard F. Vincent, ISBN 978-0871190208,
Pub. Heathkit-Zenith 1983

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ISBN 978-0871191120, Pub. Heath Company 1986

3) TTL and CMOS Circuits, Pub. Heathkit-Zenith 1987
ISBN 978-0871190017

I have many of the other books / series and this would pretty much complete the ones that I would like to have. I am also trying to "Elmer" several other new hams and soon to be hams. After 35 years since electronics school and 62 years old, the mind isn't as sharp as it used to be. I'm sure several of you can relate to this !!
If anyone has any of these books and would be willing to sell them please let me know.
Thanks in advance !!!, Glen

[Non-text portions of this message have been removed]

12138. Re: [DrakeRadio] George Graulich

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 14:48:17 UTC
From: Garey Barrell
Topic: 12135 Message: 12138

George -

This message is highly suspect, although the partial below that I modified, IS a valid company site.

Judging from the alphabetical addresses it's almost certainly spam. IF however it IS something of
interest to the group, please advise.

I have put you on moderation, just in case.

Obviously, we've all seen these traps, so if there is a link you actually want someone to look at,
please include some description or other justification.

Otherwise, ALL are best served by hitting the DELETE key!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George Graulich wrote:
> http://www.iq-technologie.at??????????????????
George Graulich

12139. Re: [DrakeRadio] Off Topic ? - Heathkit Educational Series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-21 15:10:53 UTC
From: Chgypsy@...
Topic: 12133 Message: 12139

Not an actual substitute but I am remembering that ARRL had a design book
for radio amateurs.
Carl wd8nhk

[Non-text portions of this message have been removed]

12140. Re: [DrakeRadio] George Graulich

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 00:15:58 UTC
From: Steve Wedge
Topic: 12135 Message: 12140

Have been getting a bunch of these with the same MO for a few days now. From 'John Doe', Subject, 'John Doe'. No body, just a link.

Of course, Windows Live Mail passes 'em right through but traps real emails from my friends. ;->

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, February 21, 2013 9:48 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] George Graulich

George -

This message is highly suspect, although the partial below that I modified, IS a valid company site.

Judging from the alphabetical addresses it's almost certainly spam. IF however it IS something of
interest to the group, please advise.

I have put you on moderation, just in case.

Obviously, we've all seen these traps, so if there is a link you actually want someone to look at,
please include some description or other justification.

Otherwise, ALL are best served by hitting the DELETE key!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

George Graulich wrote:
> http://www.iq-technologie.at??????????????????
George Graulich

[Non-text portions of this message have been removed]

12141. TV-3300-LP

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 00:38:49 UTC
From: fred
Topic: 12141 Message: 12141

does it have an input and output side or does it matter ?
this one is not marked in or out .

andrew
kd5pnt

12142. Re: [DrakeRadio] TV-3300-LP

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 00:54:53 UTC
From: Keith Evans
Topic: 12141 Message: 12142

Hi Andrew,
You can use either end for in or out.
73
Keith G3VKW

----- Original Message -----
From: fred
To: DrakeRadio@yahoogroups.com
Sent: Friday, February 22, 2013 12:38 AM
Subject: [DrakeRadio] TV-3300-LP

does it have an input and output side or does it matter ?
this one is not marked in or out .

andrew
kd5pnt

[Non-text portions of this message have been removed]

12143. Re: [DrakeRadio] TV-3300-LP

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 01:05:45 UTC
From: Steve Wedge
Topic: 12141 Message: 12143

I think they're pretty much symmetrical, Fred.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: fred
Sent: Thursday, February 21, 2013 7:38 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TV-3300-LP

does it have an input and output side or does it matter ?
this one is not marked in or out .

andrew
kd5pnt

[Non-text portions of this message have been removed]

12144. Draje 1A S Meter Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 02:43:43 UTC
From: theblimp68
Topic: 12144 Message: 12144

Hi All,
I am new to the group. I am having a problem with my 1A S meter. All S meter functions seem to be working with one exception. When I use the mute function the S meter needle takes off like a rocket and crashes into the stop at the right side of the meter. If anyone has a 1A please check and see if your radio does the same thing. I don't know how the radio SHOULD perform from experience. From my experience with other Drake radios (2B, R4B) it should be a leisurely trip not a rocket ride! I would guess that there would be a cap to slow the rise in voltage somewhere that might be open.
73, Bill

12145. Re: [DrakeRadio] Draje 1A S Meter Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 14:53:46 UTC
From: Garey Barrell
Topic: 12144 Message: 12145

Hi Bill -

Welcome to the group!

It's been over 50 years since I had my 1-A, and I don't recall if the S-Meter acted as you describe
or not. Generally speaking, this sort of meter activity is not harmful, as long as it doesn't bend
the needle. The inexpensive meters that Drake used had some 'mechanical' damping of the meter
needle, and I have seen cases where this damping has disappeared, making for a 'jittery' meter.

TheS-Meter circuit is somewhat different in the 1-A from the later models, but I don't see anything
that would directly affect this performance.

The only other thing I see is increased ESR in the filter cap sections C83A and B could possibly
affect this.

Hopefully someone with a1-A willbe able to give you a more informed answer!

Again, welcome tothe group!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

theblimp68 wrote:
> Hi All,
> I am new to the group. I am having a problem with my 1A S meter. All
> S meter functions seem to be working with one exception. When I use the
> mute function the S meter needle takes off like a rocket and crashes
> into the stop at the right side of the meter. If anyone has a 1A please
> check and see if your radio does the same thing. I don't know how the
> radio SHOULD perform from experience. From my experience with other
> Drake radios (2B, R4B) it should be a leisurely trip not a rocket ride!
> I would guess that there would be a cap to slow the rise in voltage
> somewhere that might be open.
> 73, Bill
>
>

12146. Re: [DrakeRadio] Draje 1A S Meter Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 20:48:46 UTC
From: Mike
Topic: 12144 Message: 12146

Just a shot in the dark.

Perhaps the agc r/c values are Lon out of whack.

No agc cap could explain the rapid meter movement.

Mike wb8vge

Sent from my iPhone

On Feb 21, 2013, at 9:43 PM, "theblimp68" <theblimp68@yahoo.com> wrote:

> Hi All,
> I am new to the group. I am having a problem with my 1A S meter. All
> S meter functions seem to be working with one exception. When I use the
> mute function the S meter needle takes off like a rocket and crashes
> into the stop at the right side of the meter. If anyone has a 1A please
> check and see if your radio does the same thing. I don't know how the
> radio SHOULD perform from experience. From my experience with other
> Drake radios (2B, R4B) it should be a leisurely trip not a rocket ride!
> I would guess that there would be a cap to slow the rise in voltage
> somewhere that might be open.
> 73, Bill
>
>

[Non-text portions of this message have been removed]

12147. Re: [DrakeRadio] Draje 1A S Meter Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-22 20:55:44 UTC
From: Paul Christensen
Topic: 12144 Message: 12147

I'll be happy to check the S-meter behavior on mine over the weekend and report back.

Paul, W9AC

----- Original Message -----
From: Mike
To: DrakeRadio@yahoogroups.com
Cc: DrakeRadio@yahoogroups.com
Sent: Friday, February 22, 2013 3:48 PM
Subject: Re: [DrakeRadio] Draje 1A S Meter Problem

Just a shot in the dark.

Perhaps the agc r/c values are Lon out of whack.

No agc cap could explain the rapid meter movement.

Mike wb8vge

Sent from my iPhone

On Feb 21, 2013, at 9:43 PM, "theblimp68" theblimp68@...> wrote:

> Hi All,
> I am new to the group. I am having a problem with my 1A S meter. All
> S meter functions seem to be working with one exception. When I use the
> mute function the S meter needle takes off like a rocket and crashes
> into the stop at the right side of the meter. If anyone has a 1A please
> check and see if your radio does the same thing. I don't know how the
> radio SHOULD perform from experience. From my experience with other
> Drake radios (2B, R4B) it should be a leisurely trip not a rocket ride!
> I would guess that there would be a cap to slow the rise in voltage
> somewhere that might be open.
> 73, Bill
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12148. MN2000 Ceramic Standoffs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 13:45:57 UTC
From: Keith Evans
Topic: 12148 Message: 12148

Hi All,
I wonder if someone can confirm the Screw Thread on these 5/8th inch Stand Offs.
I think they are made by Keystone, Then they are available in the UK,
But are they 8/32 or 6/32 Thread size.

Sorry HM Gov't has converted me sadly to Metric.

73
Keith G3VKW

[Non-text portions of this message have been removed]

12149. Re: [DrakeRadio] MN2000 Ceramic Standoffs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 15:59:48 UTC
From: n4buq
Topic: 12148 Message: 12149

Hi Keith,

I don't know as I don't have an MN2000, but I think I have some 6-32
ceramic standoffs if you end up needing them.

73,
Barry - N4BUQ

On 2/23/2013 7:45 AM, Keith Evans wrote:
> Hi All,
> I wonder if someone can confirm the Screw Thread on these 5/8th inch Stand Offs.
> I think they are made by Keystone, Then they are available in the UK,
> But are they 8/32 or 6/32 Thread size.
>
> Sorry HM Gov't has converted me sadly to Metric.
>
> 73
> Keith G3VKW
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12150. Re: [DrakeRadio] MN2000 Ceramic Standoffs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 16:11:34 UTC
From: Keith Evans
Topic: 12148 Message: 12150

Hi Barry
Thanks for the kind offer,
I'll see what size I need, the ones in the Tuner are 5/8th inch tall and 1/2 wide,
Trouble is I am not to sure what screw size they are.
Hopefully someone will tell me.

I guess they got broken, when the Tuner was Mailed to a previous owner.
Its in excellent condition otherwise.
73
Keith

----- Original Message -----
From: n4buq
To: DrakeRadio@yahoogroups.com
Sent: Saturday, February 23, 2013 3:59 PM
Subject: Re: [DrakeRadio] MN2000 Ceramic Standoffs

Hi Keith,

I don't know as I don't have an MN2000, but I think I have some 6-32
ceramic standoffs if you end up needing them.

73,
Barry - N4BUQ

On 2/23/2013 7:45 AM, Keith Evans wrote:
> Hi All,
> I wonder if someone can confirm the Screw Thread on these 5/8th inch Stand Offs.
> I think they are made by Keystone, Then they are available in the UK,
> But are they 8/32 or 6/32 Thread size.
>
> Sorry HM Gov't has converted me sadly to Metric.
>
> 73
> Keith G3VKW
>
>
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links

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[Non-text portions of this message have been removed]

12151. those little pcb inside the drake radios. How do you remove the parts?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:06:39 UTC
From: qrper
Topic: 12151 Message: 12151

Guys,

I guess calling them pcbs is technically not correct. Since they don't have traces. But for a lack of a better description...

What's the best way to remove a component? Some I can get to, others if I grew an extra arm and some if I stood on my head with the radio tilted just so.

Then there is the part that I can't see anyway of getting to unless the board is removed or loosen so it can be bent over to get to the opposite end of the part thats coming out.

so, what's the best way of removal and replacement of those parts mounted on those small boards? Is there a better way?

mike, wb8vge

12152. Re: [DrakeRadio] those little pcb inside the drake radios. How do you remove the parts?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:11:29 UTC
From: Joe
Topic: 12151 Message: 12152

A blasting cap works great!

((Sorry...My humor is sorta off-kiltered this morning!))

Joe - WA6RKN

----- Original Message -----
From: "qrper" <prosolar@...>
Subject: [DrakeRadio] those little pcb inside the drake radios. How do you remove the parts?

> Guys,
>
> I guess calling them pcbs is technically not correct. Since they don't
> have traces. But for a lack of a better description...
>
> What's the best way to remove a component? Some I can get to, others if I
> grew an extra arm and some if I stood on my head with the radio tilted
> just so.
>
> Then there is the part that I can't see anyway of getting to unless the
> board is removed or loosen so it can be bent over to get to the opposite
> end of the part thats coming out.
>
> so, what's the best way of removal and replacement of those parts mounted
> on those small boards? Is there a better way?

12153. Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:13:10 UTC
From: qrper
Topic: 12153 Message: 12153

Gang,

I'm bringing back a dead R4a and now there is life in the old girl. The chassis is not bad and the front panel is okay... far from perfect but then again neither am I.

I can easily hear 1uV and MDS level is .02uV. Haven't touched the alinement and may not even mess with it.

however, the audio seems low. I need to put the volume control at the '3' o'clock position for normal audio. In the stops, it distorts, like it should.

the 6EH5 audio tube tested high grid leakage, and the sub didn't make a bit of difference to the audio.

It hears good.... but the audio is not there.

ooooohhh..... I did notice this. When in the lower sideband mode and with the bandpass control on the row of dots on the left, the audio seems pinched. Normal, to my ears, is when I move the bandpass control more toward the center.

Could this be a reason for the low audio?

inquiring minds you know

mike wb8vge

12154. Re: [DrakeRadio] WTB - W4 wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:14:16 UTC
From: Myteaquinn
Topic: 12121 Message: 12154

Have you bought one yet? I have one that I bought with some other radio gear that I won't use. Don't know if it works can't test it either so I'm not sure what it's worth. Looks to be in great shape but I can tell that there is wear marks on the screws. And the man I bought the gear from said that all of the stuff had been sitting in his garage for about five years.On the other hand the R-4B seemed to work fine, he insisted that he show me that it worked. Let me know if your interested.

myteaquinn, west of Cleveland

--- On Wed, 2/20/13, Terrell Hamilton <hamilter@...> wrote:

From: Terrell Hamilton <hamilter@...>
Subject: [DrakeRadio] WTB - W4 wattmeter
To: DrakeRadio@yahoogroups.com
Date: Wednesday, February 20, 2013, 10:32 AM

Does anyone have a W4 wattmeter that they would sell me?

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12155. Re: [DrakeRadio] those little pcb inside the drake radios. How do you remove the parts?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:28:22 UTC
From: Garey Barrell
Topic: 12151 Message: 12155

Mike -

No simple answer. In 'most' cases if you remove the mounting screws the board can be pushed,
flipped, whatever to make the components accessible. In 'some' cases the best bet is to have my CD,
or take your own photos of the board and wiring 'in situ' and then remove it entirely.

Takes patience. Insulated wires are best cut short or held on the stripped area with a pair of
tweezers to sink desoldering heat away from the wire insulation. I also use solder wick, a small
manual vacuum pump, a large manual vacuum pump, and a Hakko 880 desoldering gun as appropriate.

Back in the 60's at NASA we had special tweezers that had a nose with a hole through it and split so
that the tweezers could be clamped around a stripped wire end allowing you to solder it to a
terminal without solder wicking up the wire. The insulation was Teflon, so didn't have the melting
problem of the Drake wire, but wire terminations with solder wicked up under the insulation would
break under vibration testing. Wish I still had some of those tweezers!

By the way, many of the boards DO have traces. I prefer to think of them as multiple tie points. The
parts aren't necessarily related, and very unusual to have a 'circuit' on one board, just a place to
mount parts that aren't wired to tube socketterminals, etc.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> Guys,
>
> I guess calling them pcbs is technically not correct. Since they don't have traces. But for a lack of a better description...
>
> What's the best way to remove a component? Some I can get to, others if I grew an extra

arm and some if I stood on my head with the radio tilted just so.
>
> Then there is the part that I can't see anyway of getting to unless the board is removed or loosen so it can be bent over to get to the opposite end of the part thats coming out.
>
> so, what's the best way of removal and replacement of those parts mounted on those small boards? Is there a better way?
>
> mike, wb8vge
>
>

12156. Re: [DrakeRadio] Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 18:32:04 UTC
From: Garey Barrell
Topic: 12153 Message: 12156

Mike -

s/n? Cathode bypass cap on the 6EH5.

Emitter voltage on the 6EH5? Emitter resistor value?

Pinched audio sounds like Passband tuner alignment, or perhaps just knob placement. Should peak
sharply in the middle of the shortest line on 400 Hz selectivity.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> Gang,
>
> I'm bringing back a dead R4a and now there is life in the old girl. The chassis is not bad and the front panel is okay... far from perfect but then again neither am I.
>
> I can easily hear 1uV and MDS level is .02uV. Haven't touched the alinement and may not even mess with it.
>
> however, the audio seems low. I need to put the volume control at the '3' o'clock position for normal audio. In the stops, it distorts, like it should.
>
> the 6EH5 audio tube tested high grid leakage, and the sub didn't make a bit of difference to the audio.
>
> It hears good.... but the audio is not there.
>
> ooooohhh..... I did notice this. When in the lower sideband mode and with the bandpass control on the row of dots on the left, the audio seems pinched. Normal, to my ears, is when I move the bandpass control more toward the center.
>
> Could this be a reason for the low audio?
>
> inquiring minds you know
>
> mike wb8vge
>
>
>

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> Yahoo! Groups Links
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12157. Re: [DrakeRadio] Draje 1A S Meter Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 19:38:06 UTC
From: Robert Logan
Topic: 12144 Message: 12157

Or maybe the resistor associated with the cap has gone way out of value. It is the second part of the delay circuit for AGC in older radios. Maybe in newer radios too but I don't know about that.

A higher value resister will discharge the cap quicker, giving 'fast' AGC while lower values will do the opposite. If I'm wrong on that, somebody please correct my info. Bob, NZ5A

Sent from my iPhone

On Feb 22, 2013, at 2:55 PM, "Paul Christensen" <w9ac@...> wrote:

I'll be happy to check the S-meter behavior on mine over the weekend and report back.

Paul, W9AC

----- Original Message -----
From: Mike
To: DrakeRadio@yahoogroups.com
Cc: DrakeRadio@yahoogroups.com
Sent: Friday, February 22, 2013 3:48 PM
Subject: Re: [DrakeRadio] Draje 1A S Meter Problem

Just a shot in the dark.

Perhaps the agc r/c values are Lon out of whack.

No agc cap could explain the rapid meter movement.

Mike wb8vge

Sent from my iPhone

On Feb 21, 2013, at 9:43 PM, "theblimp68" theblimp68@...> wrote:

> Hi All,
> I am new to the group. I am having a problem with my 1A S meter. All
> S meter functions seem to be working with one exception. When I use the
> mute function the S meter needle takes off like a rocket and crashes
> into the stop at the right side of the meter. If anyone has a 1A please
> check and see if your radio does the same thing. I don't know how the
> radio SHOULD perform from experience. From my experience with other
> Drake radios (2B, R4B) it should be a leisurely trip not a rocket ride!
> I would guess that there would be a cap to slow the rise in voltage
> somewhere that might be open.
> 73, Bill
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12158. Re: [DrakeRadio] Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 20:09:03 UTC
From: Garey Barrell
Topic: 12153 Message: 12158

Mike -

S/N?? 11 or 13 tube version??

Earlier message should have said "Cathodes" not "Emitters". Split personality!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> Gang,
>
> I'm bringing back a dead R4a and now there is life in the old girl. The chassis is not bad and the front panel is okay... far from perfect but then again neither am I.
>
> I can easily hear 1uV and MDS level is .02uV. Haven't touched the alinement and may not even mess with it.
>
> however, the audio seems low. I need to put the volume control at the '3' o'clock position for normal audio. In the stops, it distorts, like it should.
>
> the 6EH5 audio tube tested high grid leakage, and the sub didn't make a bit of difference to the audio.
>
> It hears good.... but the audio is not there.
>
> ooooohhh..... I did notice this. When in the lower sideband mode and with the bandpass control on the row of dots on the left, the audio seems pinched. Normal, to my ears, is when I move the bandpass control more toward the center.
>
> Could this be a reason for the low audio?
>
> inquiring minds you know
>
> mike wb8vge
>

12159. Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 21:41:46 UTC
From: qrper
Topic: 12153 Message: 12159

garey,

It's a 11 tube version and I don't have the number off hand. The shack is in the basement, computer upstairs.

The cathode resistor has been replaced a week ago. The little bugger had an almost invisible hair line crack in it. The cathode capacitor had been replaced, too. It had green things growing out of it.

I purchased one of your cds, but you think I can find it? Nope...

I found a start up disk for a tandy 1200 computer, a cd full of MS-dos software for the ARRL antenna book, a zillion others, but no drake cd from you.

I'll take some voltage readings and see what's going on at the base of the audio output tube.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> S/N?? 11 or 13 tube version??
>
> Earlier message should have said "Cathodes" not "Emitters". Split personality!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

12160. Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 21:43:02 UTC
From: qrper
Topic: 12153 Message: 12160

garey,

It's a 11 tube version and I don't have the number off hand. The shack is in the basement, computer upstairs.

The cathode resistor has been replaced a week ago. The little bugger had an almost invisible hair line crack in it. The cathode capacitor had been replaced, too. It had green things growing out of it.

I purchased one of your cds, but you think I can find it? Nope...

I found a start up disk for a tandy 1200 computer, a cd full of MS-dos software for the ARRL antenna book, a zillion others, but no drake cd from you.

I'll take some voltage readings and see what's going on at the base of the audio output tube.

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> S/N?? 11 or 13 tube version??
>
> Earlier message should have said "Cathodes" not "Emitters". Split personality!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

12161. Re: [DrakeRadio] Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 22:15:32 UTC
From: Garey Barrell
Topic: 12153 Message: 12161

Mike -

Yeah, I have that problem a lot too!!! Sometimes from just before lunch! :-)

This is probably the schematic. Check C173, Q7, 8 voltages.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> garey,
>
> It's a 11 tube version and I don't have the number off hand. The shack is in the basement, computer upstairs.
>
> The cathode resistor has been replaced a week ago. The little bugger had an almost invisible hair line crack in it. The cathode capacitor had been replaced, too. It had green things growing out of it.
>
> I purchased one of your cds, but you think I can find it? Nope...
>
> I found a start up disk for a tandy 1200 computer, a cd full of MS-dos software for the ARRL antenna book, a zillion others, but no drake cd from you.
>
> I'll take some voltage readings and see what's going on at the base of the audio output tube.
>
> mike, wb8vge
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Mike -
>>
>> S/N?? 11 or 13 tube version??
>>
>> Earlier message should have said "Cathodes" not "Emitters". Split personality!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>
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[Non-text portions of this message have been removed]

12162. Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 22:51:21 UTC
From: qrper
Topic: 12153 Message: 12162

thanks Garey,

I can't find my manual for it as well as the cd..I'm using a r4b manual in the time being.

on this radio, the r4a, there are two small trimmers. One i know sets the agc gain and the other the s-meter.

what one does what and how to you adjust them?

and speaking of adjusting, I've got a 2A on the other bench. I know you set the zero from the pot behind the front panel, but when I set the rear pot to an agc level of 1.5 volts, the receiver really gets quiet. am I missing something here? How do you set the level of the s-meter?

too many projects going on at the same time

mike, wb8vge

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> Yeah, I have that problem a lot too!!! Sometimes from just before lunch! :-)
>
> This is probably the schematic. Check C173, Q7, 8 voltages.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> qrper wrote:
> > garey,
> >
> > It's a 11 tube version and I don't have the number off hand. The shack is in the basement, computer upstairs.
> >
> > The cathode resistor has been replaced a week ago. The little bugger had an almost invisible hair line crack in it. The cathode capacitor had been replaced, too. It had green things growing out of it.
> >
> > I purchased one of your cds, but you think I can find it? Nope...
> >
> > I found a start up disk for a tandy 1200 computer, a cd full of MS-dos software for the ARRL antenna book, a zillion others, but no drake cd from you.

> >
> > I'll take some voltage readings and see what's going on at the base of the audio output tube.
> >
> > mike, wb8vge
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Mike -
> >>
> >> S/N?? 11 or 13 tube version??
> >>
> >> Earlier message should have said "Cathodes" not "Emitters". Split personality!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
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> [Non-text portions of this message have been removed]
>

12163. RE: [DrakeRadio] WTB - W4 wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 23:01:33 UTC
From: Terrell Hamilton
Topic: 12121 Message: 12163

Greetings!

No, I'm still w/o a wattmeter, but I've bought so much unworking stuff lately that I'm hesitant to add to the collection. Time is something I don't have much of, anymore.

Great nickname, BTW - been a long time since I've thought of The Mighty Quinn. I've been to Dayton once while in the service, don't remember if it was west or east of Cleveland... I keep saying I'm going to the Dayton hamfest before I kick off, but...

73

Terry K7WLD

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Myteaquinn
Sent: Saturday, February 23, 2013 10:14 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] WTB - W4 wattmeter

Have you bought one yet? I have one that I bought with some other radio gear that I won't use. Don't know if it works can't test it either so I'm not sure what it's worth. Looks to be in great shape but I can tell that there is wear marks on the screws. And the man I bought the gear from said that all of the stuff had been sitting in his garage for about five years.On the other hand the R-4B seemed to work fine, he insisted that he show me that it worked. Let me know if your interested.

myteaquinn, west of Cleveland

--- On Wed, 2/20/13, Terrell Hamilton hamilter@... <mailto:hamilter%40nwi.net> > wrote:

From: Terrell Hamilton hamilter@... <mailto:hamilter%40nwi.net> >
Subject: [DrakeRadio] WTB - W4 wattmeter
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Date: Wednesday, February 20, 2013, 10:32 AM

Does anyone have a W4 wattmeter that they would sell me?

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12164. Re: [DrakeRadio] WTB - W4 wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 23:08:03 UTC
From: Joe
Topic: 12121 Message: 12164

Neither! It's south!...Wa-a-a-y south......even further south than
Springfield!

Joe - WA6RKN

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
Subject: RE: [DrakeRadio] WTB - W4 wattmeter

> I've been to Dayton once while in the service, don't remember if it was
> west or east of Cleveland... I keep saying I'm going to the Dayton
> hamfest before I kick off, but...

12165. Re: [DrakeRadio] W4 at Dayton.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-23 23:16:04 UTC
From: Chgypsy@...
Topic: 12165 Message: 12165

hamilter@... writes:

Dayton once while in the service, don't remember if it was west or east of Cleveland... I keep saying I'm going to the Dayton hamfest before I kick off, but... Terry K7WLD
Hi Terry,
C'mon over.....
More the SW corner of the state, Cincinnati (at the river) is about 50 Miles S.
Carl wd8nhk

[Non-text portions of this message have been removed]

12166. Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 00:31:31 UTC
From: radiomanL
Topic: 12153 Message: 12166

open resistor on pin 6 of 6EH5 , also check for shorted bypass capacitor if there is one .

andrew
kd5pnt

[Non-text portions of this message have been removed]

12167. RE: [DrakeRadio] WTB - W4 wattmeter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 02:49:44 UTC
From: Terrell Hamilton
Topic: 12121 Message: 12167

Hi, Joe - Ah, yes, the old memory finally kicks in - I think it must have been Cinncinatti (sp?) that was to the west of Dayton, not Cleveland. Hey, it starts with a "C," anyway...

73

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Joe
Sent: Saturday, February 23, 2013 3:08 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] WTB - W4 wattmeter

Neither! It's south!...Wa-a-a-y south......even further south than Springfield!

Joe - WA6RKN

----- Original Message -----
From: "Terrell Hamilton" hamilter@... <mailto:hamilter%40nwi.net> >
Subject: RE: [DrakeRadio] WTB - W4 wattmeter

> I've been to Dayton once while in the service, don't remember if it was
> west or east of Cleveland... I keep saying I'm going to the Dayton
> hamfest before I kick off, but...

[Non-text portions of this message have been removed]

12168. Re: [DrakeRadio] Re: Low audio from R4a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 04:51:42 UTC
From: Garey Barrell
Topic: 12153 Message: 12168

Reduced resolution

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> thanks Garey,
>
> I can't find my manual for it as well as the cd..I'm using a r4b manual in the time being.
>
> on this radio, the r4a, there are two small trimmers. One i know sets the agc gain and the other the s-meter.
>
> what one does what and how to you adjust them?
>
> and speaking of adjusting, I've got a 2A on the other bench. I know you set the zero from the pot behind the front panel, but when I set the rear pot to an agc level of 1.5 volts, the receiver really gets quiet. am I missing something here? How do you set the level of the s-meter?
>
> too many projects going on at the same time
>
> mike, wb8vge
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Mike -
>>
>> Yeah, I have that problem a lot too!!! Sometimes from just before lunch! :-)
>>
>> This is probably the schematic. Check C173, Q7, 8 voltages.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> qrper wrote:
>>> garey,

>>>
>>> It's a 11 tube version and I don't have the number off hand. The shack is in the basement, computer upstairs.
>>>
>>> The cathode resistor has been replaced a week ago. The little bugger had an almost invisible hair line crack in it. The cathode capacitor had been replaced, too. It had green things growing out of it.
>>>
>>> I purchased one of your cds, but you think I can find it? Nope...
>>>
>>> I found a start up disk for a tandy 1200 computer, a cd full of MS-dos software for the ARRL antenna book, a zillion others, but no drake cd from you.
>>>
>>> I'll take some voltage readings and see what's going on at the base of the audio output tube.
>>>
>>> mike, wb8vge
>>>
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Mike -
>>>>
>>>> S/N?? 11 or 13 tube version??
>>>>
>>>> Earlier message should have said "Cathodes" not "Emitters". Split personality!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
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[Non-text portions of this message have been removed]

12169. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 04:52:34 UTC
From: K4GM
Topic: 11677 Message: 12169

Will do. The new resistor (decided to go for a 10 watt) arrived
Friday. Am in Richmond area this weekend playing in a pool tournament .
Will install soon though and put a blurb on the reflector. Just want to
make sure it works for a day or two before I do the writeup. Thanks again.

George K4GM

On 2/16/2013 9:55 PM, Garey Barrell wrote:
>
> George -
>
> Cool!! Always nice when one comes to life! :-)
>
> If you would, please write up a little description of the symptoms,
> what you found and how you fixed
> it to post to the list. Since we worked this one out 'off the books',
> it would be nice to get it
> into the Archives of DrakeRadio:Yahoo.
>
> Thanks!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> George- K4GM wrote:
> > Garey--
> >
> > I just made a temporary 19k 2.5 watt resistor from 5 20k resistors I had
> > and inserted it. Measures 10.4 volts where the collector should connect.
> > Soldered the collector and turned the RV-4C on. Like magic it works!
> > So now I will order a permanent resistor. I think you fixed another one.
> > Thanks for the help.
> >
> > 73, George K4GM
> >
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Monday, February 11, 2013 10:13 PM
> >> George -
> >>
> >> Wow, haven't seen that before. Might be worth sticking a new resistor
> >> in there, even a 2W if you have one handy, maybe up to say 18-20k, and

> >> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
> >> but since most sit with the transceiver controlling, Q3 Collector was
> >> at 0, and dissipation was continuous in R15. They tended to go up in
> >> value, so the 5.25W version was installed in new units. A seven or
> >> ten Watt replacementmight be easier to find today, and there's plenty
> >> ofroom. You want just the end of that resistor going to the PTO
> >> terminal with the Collector of Q3 disconnected. Should read 11VDC.
> >> If still 0, time to open the PTO.!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
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> >>
> >> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>
> >> Monday, February 11, 2013 9:36 PM
> >> Garey-
> >>
> >> Yes that is correct except now reads zero voltage on the landing where
> >> the collector is connected after unsoldering the collector. I
> >> disconnected R15 and it is completely open. I became suspicious when I
> >> saw a small chip of ceramic missing on R15. You think C20 shorted(
> >> or maybe the zener) and blew R15 open ?? A resistor acting like a
> >> fuse! Reminds me of the old fusistors.....
> >>
> >> --George
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Monday, February 11, 2013 9:57 AM
> >> George -
> >>
> >> Just to confirm. Leaving the lead from R15 connected to the PTO, and
> >> disconnecting the Collector lead from Q3, you still haveonly a
> >> fraction of a volt on the PTO?
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
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> >>
> >>
> >> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>

> >> Sunday, February 10, 2013 11:15 PM
> >> Garey-
> >>
> >> Thanks again. Followed your suggestion and could not produce 11
> >> volts on the bus. So the problem is the zener or C20 or both. I will
> >> order the replacements. Sure wish I could get to these parts without
> >> removing the PTO but that doesn't look likely....
> >>
> >> -- 73, George K4GM
> >>
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Sunday, February 10, 2013 11:47 AM
> >> George -
> >>
> >> OK. With the RV-4Cset to control, just short the Base to ground, and
> >> see if the Collector comes up to 11V. If not, disconnect the
> >> Collector lead from the PTO supply bus and see if the bus comes up to
> >> 11V. If it DOES, Q3 is shorted. If it does NOT come up, then the
> >> short is internal to the PTO, a shorted C20 or Zener.
> >>
> >> 73, Garey - K4OAH
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> > [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12170. Re: OEM Instruction Manual for Drake 34-NB Noise Blanker Kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 16:10:33 UTC
From: Bill Jackson
Topic: 12170 Message: 12170

The manual has been spoken for by a local ham.

73 de Bill, K9RZ

[Non-text portions of this message have been removed]

12171. Drake radios for sale, N3JQD

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 20:07:44 UTC
From: bobsalmon@juno.com
Topic: 12171 Message: 12171

I'm a member of this forum. After many years I will be selling my collection of Drakes.
I will list them here and then will begin entering them on QRZ and QTH individually for sale.
On those sites, I will also list the various s/n numbers.

I have 2 sets of Drake twins: 2 T-4x's with R-4 and an R-4B. Both of those with MS4 and AC3's.
a TR4 with factory installed NB and matching MS4 with an AC4 PS. This Tr4 is a 9.5 out of 10.
Shire 444 and a D-104 amp type. Hammarlund HQ-100 also available.

Look for the ads to appear on Monday. I thought that I would start here with the true enthusiasts first.
I will send pics soon. Thanks. Bob.

Woman is 55, But Looks 27
2013's No. 1 Cream. Mom is Wrinkle Free Thanks to Doctor's Secret!
http://thirdpartyoffers.juno.com/TGL3141/512a734389f7173434561st01vuc

12172. T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 20:15:18 UTC
From: zl1bbw
Topic: 12172 Message: 12172

T4XC.. turn the tuning knob clockwise its fine smooth as, dial goes smoothly turn the knob counter clockwise and it takes a full turn before the dial starts to move, then its smooth.

Any clues on where to start? thanks Gavin

p.s. found the fault on the T4XB no output, just about to start checking voltages etc, when had a bright idea and checked the piece of coax from Tx to swr meter, on that TX is had gone open circuit, hence why when I moved swr/dummy load to other rigs it was fine. I always leave one piece of coax plugged into back of Tx's makes it easier to connect up. Very happy with that result.

12173. Re: [DrakeRadio] T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 20:57:43 UTC
From: Garey Barrell
Topic: 12172 Message: 12173

Gavin -

Sounds like classic clutch wear. LoosenMAIN TUNING knob setscrew, press in on knob and hold while
tightening setscrew.

If this is the problem, you can probably improve things by taking some sandpaper to the ENDS of the
little section of rubber/plastic tubing just behind knob skirt plate. A piece of auto rubber tubing
(3/8" i.d. / 5/8" o.d. X ~1/2" long) with the ends cut SQUARE is a suitable replacement.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

zl1bbw wrote:
> T4XC.. turn the tuning knob clockwise its fine smooth as, dial goes smoothly turn the knob counter clockwise and it takes a full turn before the dial starts to move, then its smooth.
>
> Any clues on where to start? thanks Gavin
>
> p.s. found the fault on the T4XB no output, just about to start checking voltages etc, when had a bright idea and checked the piece of coax from Tx to swr meter, on that TX is had gone open circuit, hence why when I moved swr/dummy load to other rigs it was fine. I always leave one piece of coax plugged into back of Tx's makes it easier to connect up. Very happy with that result.
>
>

12174. Re: T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 21:20:50 UTC
From: zl1bbw
Topic: 12172 Message: 12174

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Gavin -
>
> Sounds like classic clutch wear. LoosenMAIN TUNING knob setscrew, press in on knob and hold while
> tightening setscrew.
>
> If this is the problem, you can probably improve things by taking some sandpaper to the ENDS of the
> little section of rubber/plastic tubing just behind knob skirt plate. A piece of auto rubber tubing
> (3/8" i.d. / 5/8" o.d. X ~1/2" long) with the ends cut SQUARE is a suitable replacement.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> zl1bbw wrote:
> > T4XC.. turn the tuning knob clockwise its fine smooth as, dial goes smoothly turn the knob counter clockwise and it takes a full turn before the dial starts to move, then its smooth.
> >
> > Any clues on where to start? thanks Gavin
> >
> > p.s. found the fault on the T4XB no output, just about to start checking voltages etc, when had a bright idea and checked the piece of coax from Tx to swr meter, on that TX is had gone open circuit, hence why when I moved swr/dummy load to other rigs it was fine. I always leave one piece of coax plugged into back of Tx's makes it easier to connect up. Very happy with that result.
> >
Ah Ha,, thanks that has cured that problem, will be ordering some new rubbers and other bits from 2B parts.. now just got to fix the crystal calibrator in the 4C.
> >
>

12175. Re: [DrakeRadio] Re: T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 21:52:23 UTC
From: Garey Barrell
Topic: 12172 Message: 12175

zl1bbw wrote:
> Ah Ha,, thanks that has cured that problem, will be ordering some new rubbers and other bits from 2B parts.. now just got to fix the crystal calibrator in the 4C.

What's with the calibrator??

12176. Re: [DrakeRadio] Drake radios for sale, N3JQD

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 21:52:09 UTC
From: vacuuminded2@...
Topic: 12171 Message: 12176

Prices?

Sent from my outdated iPhone wireless thingy

On Feb 24, 2013, at 8:07 PM, "bobsalmon@..." <bobsalmon@...> wrote:

> I'm a member of this forum. After many years I will be selling my collection of Drakes.
> I will list them here and then will begin entering them on QRZ and QTH individually for sale.
> On those sites, I will also list the various s/n numbers.
>
> I have 2 sets of Drake twins: 2 T-4x's with R-4 and an R-4B. Both of those with MS4 and AC3's.
> a TR4 with factory installed NB and matching MS4 with an AC4 PS. This Tr4 is a 9.5 out of 10.
> Shire 444 and a D-104 amp type. Hammarlund HQ-100 also available.
>
> Look for the ads to appear on Monday. I thought that I would start here with the true enthusiasts first.
> I will send pics soon. Thanks. Bob.
>
> ____
> Woman is 55, But Looks 27
> 2013's No. 1 Cream. Mom is Wrinkle Free Thanks to Doctor's Secret!
> http://thirdpartyoffers.juno.com/TGL3141/512a734389f7173434561st01vuc
>

[Non-text portions of this message have been removed]

12177. Re: T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 22:47:48 UTC
From: zl1bbw
Topic: 12172 Message: 12177

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> zl1bbw wrote:
> > Ah Ha,, thanks that has cured that problem, will be ordering some new rubbers and other bits from 2B parts.. now just got to fix the crystal calibrator in the 4C.
>
> What's with the calibrator??

Unfortunately nothing, get a speaker click as the power goes on to the board, just checked got volts and earth on the 4 pin plug, but no action. Anything that normally goes phut on these? or just a case of checking through the board components? Thanks
>

12178. Re: [DrakeRadio] Drake radios for sale, N3JQD

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 22:59:12 UTC
From: Robert Logan
Topic: 12171 Message: 12178

Bob, I would be interested in the HQ-100, strangely enough. What do you want to get for it? Thanks, Bob, NZ5A

Sent from my iPhone

On Feb 24, 2013, at 3:52 PM, vacuuminded2@... wrote:

Prices?

Sent from my outdated iPhone wireless thingy

On Feb 24, 2013, at 8:07 PM, "bobsalmon@..." bobsalmon@...> wrote:

> I'm a member of this forum. After many years I will be selling my collection of Drakes.
> I will list them here and then will begin entering them on QRZ and QTH individually for sale.
> On those sites, I will also list the various s/n numbers.
>
> I have 2 sets of Drake twins: 2 T-4x's with R-4 and an R-4B. Both of those with MS4 and AC3's.
> a TR4 with factory installed NB and matching MS4 with an AC4 PS. This Tr4 is a 9.5 out of 10.
> Shire 444 and a D-104 amp type. Hammarlund HQ-100 also available.
>
> Look for the ads to appear on Monday. I thought that I would start here with the true enthusiasts first.
> I will send pics soon. Thanks. Bob.
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> --
> Woman is 55, But Looks 27
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> http://thirdpartyoffers.juno.com/TGL3141/512a734389f7173434561st01vuc
>

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[Non-text portions of this message have been removed]

12179. Re: [DrakeRadio] Bringing my TR-4 back to life... almost there

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 00:49:13 UTC
From: Mark Pilant
Topic: 11909 Message: 12179

A couple of days ago, I ordered some parts for the TR-4 and my L-4B from Mouser. They should be here is a couple of days. In particular, I waiting for the (proper) replacement MIC jack. (Unfortunately, I forgot to get a replacement for the choke which was toast. Lucky for me it is only needed if I want to have a separate receiver :-)

While waiting for the jack, I have gone about half way through the alignment. I've done the receive parts, and have just started on the transmit portion. I was a bit surprised to see that for most of the receive adjustments, things weren't too far out.

It has been nice to be able to listen on all the various bands as I poke along getting this rig back into shape.

Not too far down my list of things to get is a spare set of finals. As I was starting on the transmit alignment, I had the rig just barely (really idling) transmitting into a dummy load and I happened to see a single flash from one of the finals. I did actually try upping the power into the dummy load without incident. But....

Hopefully I'll get some more time before too long to continue on. Then I'll do the happy dance when I put the covers on for the last time :-) :-)

Oh yes, when I got the rig it needed some serious cleaning. I wasn't sure where all the "crud" came from until today. As I turned the rig over so I could get to the underside of the chassis, I noticed a couple of pieces of acorn shell on the work bench. Gee, I wonder where those came from :-) :-) :-)

73

- Mark N1VQW

12180. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 01:07:40 UTC
From: George- K4GM
Topic: 11677 Message: 12180

Garey-

Installation of new resistor is complete and the RV-4C seems to work
well. Even that 10 watt resistor gets really warm. I have noticed that
when using the RV-4C signals are about 10 db stronger on the S meter
(and sound stronger too) . Is that normal ?

-George K4GM

> Garey Barrell <mailto:k4oah@...>
> Saturday, February 16, 2013 9:55 PM
>
> George -
>
> Cool!! Always nice when one comes to life! :-)
>
> If you would, please write up a little description of the symptoms,
> what you found and how you fixed
> it to post to the list. Since we worked this one out 'off the books',
> it would be nice to get it
> into the Archives of DrakeRadio:Yahoo.
>
> Thanks!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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>
> George- K4GM wrote:
> > Garey--
> >
> > I just made a temporary 19k 2.5 watt resistor from 5 20k resistors I had
> > and inserted it. Measures 10.4 volts where the collector should connect.
> > Soldered the collector and turned the RV-4C on. Like magic it works!
> > So now I will order a permanent resistor. I think you fixed another one.
> > Thanks for the help.
> >
> > 73, George K4GM
> >
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Monday, February 11, 2013 10:13 PM
> >> George -
> >>

> >> Wow, haven't seen that before. Might be worth sticking a new resistor
> >> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
> >> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
> >> but since most sit with the transceiver controlling, Q3 Collector was
> >> at 0, and dissipation was continuous in R15. They tended to go up in
> >> value, so the 5.25W version was installed in new units. A seven or
> >> ten Watt replacementmight be easier to find today, and there's plenty
> >> ofroom. You want just the end of that resistor going to the PTO
> >> terminal with the Collector of Q3 disconnected. Should read 11VDC.
> >> If still 0, time to open the PTO.!
> >>
> >> 73, Garey - K4OAH
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> >>
> >> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>
> >> Monday, February 11, 2013 9:36 PM
> >> Garey-
> >>
> >> Yes that is correct except now reads zero voltage on the landing where
> >> the collector is connected after unsoldering the collector. I
> >> disconnected R15 and it is completely open. I became suspicious when I
> >> saw a small chip of ceramic missing on R15. You think C20 shorted(
> >> or maybe the zener) and blew R15 open ?? A resistor acting like a
> >> fuse! Reminds me of the old fusistors.....
> >>
> >> --George
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Monday, February 11, 2013 9:57 AM
> >> George -
> >>
> >> Just to confirm. Leaving the lead from R15 connected to the PTO, and
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> >> fraction of a volt on the PTO?
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> >>
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> >>

> >>
> >> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>
> >> Sunday, February 10, 2013 11:15 PM
> >> Garey-
> >>
> >> Thanks again. Followed your suggestion and could not produce 11
> >> volts on the bus. So the problem is the zener or C20 or both. I will
> >> order the replacements. Sure wish I could get to these parts without
> >> removing the PTO but that doesn't look likely....
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> >> -- 73, George K4GM
> >>
> >> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
> >> Sunday, February 10, 2013 11:47 AM
> >> George -
> >>
> >> OK. With the RV-4Cset to control, just short the Base to ground, and
> >> see if the Collector comes up to 11V. If not, disconnect the
> >> Collector lead from the PTO supply bus and see if the bus comes up to
> >> 11V. If it DOES, Q3 is shorted. If it does NOT come up, then the
> >> short is internal to the PTO, a shorted C20 or Zener.
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> > ------------------------------------
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> > Yahoo! Groups Links
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>
> George- K4GM <mailto:k4gm@...>
> Saturday, February 16, 2013 7:03 PM
> Garey--
>

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> connect. Soldered the collector and turned the RV-4C on. Like magic it
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> another one. Thanks for the help.
>
> 73, George K4GM
>
> Garey Barrell <mailto:k4oah@...>
> Monday, February 11, 2013 10:13 PM
> George -
>
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> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
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> but since most sit with the transceiver controlling, Q3 Collector was
> at 0, and dissipation was continuous in R15. They tended to go up in
> value, so the 5.25W version was installed in new units. A seven or
> ten Watt replacementmight be easier to find today, and there's plenty
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>
> George- K4GM <mailto:k4gm@...>
> Monday, February 11, 2013 9:36 PM
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> Yes that is correct except now reads zero voltage on the landing where
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> saw a small chip of ceramic missing on R15. You think C20 shorted(
> or maybe the zener) and blew R15 open ?? A resistor acting like a
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> Garey Barrell <mailto:k4oah@...>
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> <www.k4oah.com>
>
>
>
>

[Non-text portions of this message have been removed]

12181. Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-24 23:08:51 UTC
From: Fraser
Topic: 12181 Message: 12181

Does anyone have a schematic of the early AC-3 power supply? The one without can caps on the top, but with all the caps underneath the chassis.

I have one coming, and I'd just like to get replacement caps beforehand.

Thanks,

Fraser, W3UTD

12182. Re: [DrakeRadio] Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 03:48:52 UTC
From: Garey Barrell
Topic: 12181 Message: 12182

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fraser wrote:
> Does anyone have a schematic of the early AC-3 power supply? The one without can caps on the top, but with all the caps underneath the chassis.
>
> I have one coming, and I'd just like to get replacement caps beforehand.
>
> Thanks,
>
> Fraser, W3UTD
>

[Non-text portions of this message have been removed]

12183. Re: [DrakeRadio] Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 03:56:25 UTC
From: Garey Barrell
Topic: 12181 Message: 12183

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fraser wrote:
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>
> I have one coming, and I'd just like to get replacement caps beforehand.
>
> Thanks,
>
> Fraser, W3UTD
>
>

[Non-text portions of this message have been removed]

12184. Re: [DrakeRadio] RV4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 04:12:44 UTC
From: Garey Barrell
Topic: 11677 Message: 12184

George -

OK. Keep in mind that 2W of heat is 2W of heat. The only difference in a 1/2W and a 10W resistor is
the ability of the package to a, withstand a certain amount of heat; and b, the relative amount of
package to air interface is available to get rid of that heat! That 10W resistor is dissipating
the same abount of heat to the atmosphere as the 2W was, just transferring it more efficiently.

Usually it's the other way around! The cable capacitance tends to load things down. Be sure there
is a 12AU7 in there and not anAT or AX. Otherwise I wouldn't worry about it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

George- K4GM wrote:
> Garey-
>
> Installation of new resistor is complete and the RV-4C seems to work
> well. Even that 10 watt resistor gets really warm. I have noticed that
> when using the RV-4C signals are about 10 db stronger on the S meter
> (and sound stronger too) . Is that normal ?
>
> -George K4GM
>
>> Garey Barrell <mailto:k4oah@...>
>> Saturday, February 16, 2013 9:55 PM
>>
>> George -
>>
>> Cool!! Always nice when one comes to life! :-)
>>
>> If you would, please write up a little description of the symptoms,
>> what you found and how you fixed
>> it to post to the list. Since we worked this one out 'off the books',
>> it would be nice to get it
>> into the Archives of DrakeRadio:Yahoo.
>>
>> Thanks!

>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>>
>>
>> George- K4GM wrote:
>>> Garey--
>>>
>>> I just made a temporary 19k 2.5 watt resistor from 5 20k resistors I had
>>> and inserted it. Measures 10.4 volts where the collector should connect.
>>> Soldered the collector and turned the RV-4C on. Like magic it works!
>>> So now I will order a permanent resistor. I think you fixed another one.
>>> Thanks for the help.
>>>
>>> 73, George K4GM
>>>
>>>> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
>>>> Monday, February 11, 2013 10:13 PM
>>>> George -
>>>>
>>>> Wow, haven't seen that before. Might be worth sticking a new resistor
>>>> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
>>>> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
>>>> but since most sit with the transceiver controlling, Q3 Collector was
>>>> at 0, and dissipation was continuous in R15. They tended to go up in
>>>> value, so the 5.25W version was installed in new units. A seven or
>>>> ten Watt replacementmight be easier to find today, and there's plenty
>>>> ofroom. You want just the end of that resistor going to the PTO
>>>> terminal with the Collector of Q3 disconnected. Should read 11VDC.
>>>> If still 0, time to open the PTO.!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>>
>>>>
>>>>
>>>>
>>>>
>>>> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>
>>>> Monday, February 11, 2013 9:36 PM
>>>> Garey-
>>>>
>>>> Yes that is correct except now reads zero voltage on the landing where
>>>> the collector is connected after unsoldering the collector. I

>>>> disconnected R15 and it is completely open. I became suspicious when I
>>>> saw a small chip of ceramic missing on R15. You think C20 shorted(
>>>> or maybe the zener) and blew R15 open ?? A resistor acting like a
>>>> fuse! Reminds me of the old fusistors.....
>>>>
>>>> --George
>>>> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
>>>> Monday, February 11, 2013 9:57 AM
>>>> George -
>>>>
>>>> Just to confirm. Leaving the lead from R15 connected to the PTO, and
>>>> disconnecting the Collector lead from Q3, you still haveonly a
>>>> fraction of a volt on the PTO?
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>>
>>>>
>>>>
>>>>
>>>>
>>>> George- K4GM k4gm@... <mailto:k4gm%40verizon.net>>
>>>> Sunday, February 10, 2013 11:15 PM
>>>> Garey-
>>>>
>>>> Thanks again. Followed your suggestion and could not produce 11
>>>> volts on the bus. So the problem is the zener or C20 or both. I will
>>>> order the replacements. Sure wish I could get to these parts without
>>>> removing the PTO but that doesn't look likely....
>>>>
>>>> -- 73, George K4GM
>>>>
>>>> Garey Barrell k4oah@... <mailto:k4oah%40mindspring.com>>
>>>> Sunday, February 10, 2013 11:47 AM
>>>> George -
>>>>
>>>> OK. With the RV-4Cset to control, just short the Base to ground, and
>>>> see if the Collector comes up to 11V. If not, disconnect the
>>>> Collector lead from the PTO supply bus and see if the bus comes up to
>>>> 11V. If it DOES, Q3 is shorted. If it does NOT come up, then the
>>>> short is internal to the PTO, a shorted C20 or Zener.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs

>>>>
>>>>
>>>>
>>>>
>>>>
>>> [Non-text portions of this message have been removed]
>>>
>>>
>>>
>>> ------------------------------------
>>>
>>> Yahoo! Groups Links
>>>
>>>
>>>
>>>
>>
>> George- K4GM <mailto:k4gm@...>
>> Saturday, February 16, 2013 7:03 PM
>> Garey--
>>
>> I just made a temporary 19k 2.5 watt resistor from 5 20k resistors I
>> had and inserted it. Measures 10.4 volts where the collector should
>> connect. Soldered the collector and turned the RV-4C on. Like magic it
>> works! So now I will order a permanent resistor. I think you fixed
>> another one. Thanks for the help.
>>
>> 73, George K4GM
>>
>> Garey Barrell <mailto:k4oah@...>
>> Monday, February 11, 2013 10:13 PM
>> George -
>>
>> Wow, haven't seen that before. Might be worth sticking a new resistor
>> in there, even a 2W if you have one handy, maybe up to say 18-20k, and
>> see if that brings you 11V. Earlier versions had a 2W carbon at R15,
>> but since most sit with the transceiver controlling, Q3 Collector was
>> at 0, and dissipation was continuous in R15. They tended to go up in
>> value, so the 5.25W version was installed in new units. A seven or
>> ten Watt replacementmight be easier to find today, and there's plenty
>> ofroom. You want just the end of that resistor going to the PTO
>> terminal with the Collector of Q3 disconnected. Should read 11VDC.
>> If still 0, time to open the PTO.!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>

>>
>>
>>
>>
>> George- K4GM <mailto:k4gm@...>
>> Monday, February 11, 2013 9:36 PM
>> Garey-
>>
>> Yes that is correct except now reads zero voltage on the landing where
>> the collector is connected after unsoldering the collector. I
>> disconnected R15 and it is completely open. I became suspicious when I
>> saw a small chip of ceramic missing on R15. You think C20 shorted(
>> or maybe the zener) and blew R15 open ?? A resistor acting like a
>> fuse! Reminds me of the old fusistors.....
>>
>> --George
>> Garey Barrell <mailto:k4oah@...>
>> Monday, February 11, 2013 9:57 AM
>> George -
>>
>> Just to confirm. Leaving the lead from R15 connected to the PTO, and
>> disconnecting the Collector lead from Q3, you still haveonly a
>> fraction of a volt on the PTO?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>>
>>
>>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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>
>

12185. Re: TR 4 sideband switch problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 04:24:58 UTC
From: wd5hxb
Topic: 9266 Message: 12185

--- Solved with LSB crystal from Inrad, thanks to you guys advice, special thanks to Roger for the Inrad address. Next post will be a good one also...thanks guys.

12186. Amplifier

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 04:32:26 UTC
From: wd5hxb
Topic: 12186 Message: 12186

Now that the TR-4 is working fine, which amp does one buy? Leaning towards FL 2100 B or SB 200 (financial limitations apply). Do have one line on Drake L4B without tubes that sure would look good beside the TR4 and Matching MS4. With that said are there major complications hooking the grounded grid 2100 and 200 to the TR 4,,,will an external relay be needed and what about this alc from pin 3?(I don't have my manual in here right now) to the alc to an amp? Not to worry yet about hook up, I bet they can all be hooked, any advice on 2100 versus sb 200..yeah, I know the 200 would probably be the best choice, but darn that LB would look good but bidding will probably put it out of reach...thanks for all the help guys but the tr 4 is doing a great job as of now....another.

Where and when is the Drake Net? tnx de HXB.

I'll also be looking for a 1.5 kw tuner...de HXB.

12187. Re: [DrakeRadio] TR-4 back to life...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 13:02:40 UTC
From: Chgypsy@...
Topic: 12187 Message: 12187

n1vqw@... writes:

In particular, waiting for the (proper) replacement MIC jack.
Anyone else want one? I have the one in my parts unit.

Didn't remember who made the posting about wanting to replace...sorry Mark

[Non-text portions of this message have been removed]

12188. F/S Drake TV-100

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 14:57:36 UTC
From: Ronnie
Topic: 12188 Message: 12188

For sale:
Drake TV-100 LP Filter only 100 W. 52 Ohms below 30Mc.

Shipped $21

Rock

12189. Re: [DrakeRadio] Re: T4XC DIAL BACKLASH

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 15:09:50 UTC
From: Garey Barrell
Topic: 12172 Message: 12189

zl1bbw wrote:
> --- InDrakeRadio@yahoogroups.com, Garey Barrell<k4oah@...> wrote:
>> zl1bbw wrote:
>>> Ah Ha,, thanks that has cured that problem, will be ordering some new rubbers and other bits from 2B parts.. now just got to fix the crystal calibrator in the 4C.
>> What's with the calibrator??
> Unfortunately nothing, get a speaker click as the power goes on to the board, just checked got volts and earth on the 4 pin plug, but no action. Anything that normally goes phut on these? or just a case of checking through the board components? Thanks
>
Gavin -

Try pulling up slightly on the board. I have seen a few where component leads were not cut short
enough and when pressed fully down they shorted to the chassis.

You can try adjusting the trimmer capacitor a couple of turns one way andanother and then returning
to where it is.

Also, check the voltage on the big electrolytic and the smaller tantalum capacitor. The Zener diode
should have very close to 10.00 VDC on it. If DC voltages are correct, and assuming you cannot hear
the 100 kHz markers at all, possibly a bad FET or even a crystal. MPF-102 is an ok FET if availability is a problem.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12190. Re: Drake R-4A, R-4B, or T-4X plastic dial scale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 16:48:26 UTC
From: Al Schichler
Topic: 12050 Message: 12190

I just thought I would send an update about the plastic dial scale.
I have access to an industrial environmental chamber where I work, so I clamped the dial scale between two 6" square pieces of glass and put it in the chamber at 45 degrees Celsius (about 113 F) to start. It was flatter, but not perfect, but after raising the temperature to 55 C (about 131 F) for about two hours, it was very flat, about like when it was new.
If using an oven, it would probably work fine if it can be set to somewhere between 120 to 135 degrees. I don't know how easy that would be to maintain with most kitchen ovens though.

Another thing I found out was that I could use rubbing compound and polishing compound on both sides of the dial scale without any of the numbers wearing off. The printing seems to be sandwiched inside of the plastic, so it doesn't rub off. That make it easy to remove fairly deep scratches without ruining any of the numbers.
At least that was my experience with the R-4A plastic dial scale (the later one without 5 kHz markings).

Al,
WA2S

12191. TR7 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 18:05:18 UTC
From: Adrian Rees
Topic: 12191 Message: 12191

All

I have a Drake TR7 & Power Supply For Sale.

I purchased the non Working, but complete TR7 & PSU in 2008, with the intention of restoring it to full working order.
Alas I have no spare time, and for the fore seeable future won't have time to devote to this project. So its For Sale.

The Transceiver was dead when first acquired, and a staright forward replacement of the Variable Resistors in the Power Board brought the RX back to life.

Since then nothing has been done. The TX may work, it may not!

Clearly the Power Supply works though !

Its located in North Wales (UK) complete with a few spare boards & parts, and is mechanically complete.

Happy to ship world wide, althoughg it will be expensive, due to weight.

Reasonable offers please !

Happy to photograph (at the weekend) to those interested.

Email off list if interested: rees.a@...

Cheers

Adrian MW1LCR

12192. R4B intermittent passband

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 18:42:32 UTC
From: jnminni@att.net
Topic: 12192 Message: 12192

My R4B has developed a new "opportunity" for me to work on. The passband tuning has developed an intermittency similar to how a dirty pot would sound when you wriggle the knob. Now I think that inside that passband tuning box there is just a slug that moves in and out of an inductor. So I don't know how to begin with this. Possibly a broken wire or loose connection inside the box would cause this. I suppose that it is also possible that dirty contacts in the bandwidth switch (that shares a concentric shaft with the passband tuning) could be the problem, but really it seems more like it is the passband tuning itself. How would I begin to work on this? How difficult is it to get that passband tuning enclosure apart and, more importantly, how difficult to get it back together.
John/AC8KU

12193. Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 18:34:55 UTC
From: oh6nt
Topic: 12193 Message: 12193

Hello list.

Have a refurbished Heathkit HD-1410 Electronic keyer, but miss the power cord... Can anyone tell me the type of the mains female plug that should go into the back of the unit, and where I could obtain such a plug?

OH6NT / Thomas

12194. Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 19:13:30 UTC
From: toptyp19
Topic: 12193 Message: 12194

Hi Thomas-

I don't know if you can find them in Finland but the old TV cheater
cords will fit perfectly.

Joe-WA9LAE

--- In DrakeRadio@yahoogroups.com, "oh6nt" <oatpower@...> wrote:
>
> Hello list.
>
> Have a refurbished Heathkit HD-1410 Electronic keyer, but miss the power cord... Can anyone tell me the type of the mains female plug that should go into the back of the unit, and where I could obtain such a plug?
>
> OH6NT / Thomas
>

12195. Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 19:20:14 UTC
From: oh6nt
Topic: 12193 Message: 12195

Hey Joe;

Sorry to say, but I don't really know what U mean by "cheater cord" - As you might know we use 230 V mains here, so we have no plugs/sockets with those dimension in the junk box... Maybe someone can supply one of those if they get compensation by some $$ (paypal?)

Thomas / OH6NT

--- In DrakeRadio@yahoogroups.com, "toptyp19" <toptyp19@...> wrote:
>
> Hi Thomas-
>
> I don't know if you can find them in Finland but the old TV cheater
> cords will fit perfectly.
>
> Joe-WA9LAE
>

12196. Re: [DrakeRadio] Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 20:11:33 UTC
From: Michael Shelly
Topic: 12193 Message: 12196

If I remember it is the old style TV power plug receptical. Some of the classic heathkit radios also had this plug

Mike
WB2KKI

>_____
>From: oh6nt <oatpower@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Monday, February 25, 2013 1:34 PM
>Subject: [DrakeRadio] Slightly off-topic: Heathkit keyer power plug
>
>
>Hello list.
>
>Have a refurbished Heathkit HD-1410 Electronic keyer, but miss the power cord... Can anyone tell me the type of the mains female plug that should go into the back of the unit, and where I could obtain such a plug?
>
>OH6NT / Thomas
>
>
>

[Non-text portions of this message have been removed]

12197. Re: [DrakeRadio] Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 20:34:39 UTC
From: William Houghton
Topic: 12193 Message: 12197

Thomas,

Back in the days of TV sets that used vacuum tubes (valves) it was often necessary to remove the back of the set for servicing. The mains cord terminated in a female plug that was attached to the back of the set. This female plug mated with a set of male pins attached to the chassis. Thus mains power was automatically removed from the chassis whenever the back was removed from the TV set. Sometime this female plug was attached to the back with rivets, sometimes with a metal clip. This arrangement was sometimes found on tabletop radios.

TV service people had a cord with this female plug but no mounting ears in their toolbox. It was called a "cheater cord" because it allowed the service person to "cheat" and operate the TV with the back of the set removed.

I do remember removing one from an TV set back and cutting off the mounting ears.

I have seen them on ebay typically going for $5 to $10.

73,

Bill

From: oh6nt <oatpower@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, February 25, 2013 11:36:21 AM
Subject: [DrakeRadio] Re: Slightly off-topic: Heathkit keyer power plug

Hey Joe;

Sorry to say, but I don't really know what U mean by "cheater cord" - As you might know we use 230 V mains here, so we have no plugs/sockets with those dimension in the junk box... Maybe someone can supply one of those if they get compensation by some $$ (paypal?)

Thomas / OH6NT

--- In DrakeRadio@yahoogroups.com, "toptyp19" wrote:
>
> Hi Thomas-
>
> I don't know if you can find them in Finland but the old TV cheater
> cords will fit perfectly.
>
> Joe-WA9LAE
>

[Non-text portions of this message have been removed]

12198. Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 20:40:24 UTC
From: toptyp19
Topic: 12193 Message: 12198

Thomas-

All Electronics has them here in the states. I called their toll-free number: 1-888-826-5432 They told me they will ship to Finland. You can use Paypal but the package will have to be trackable with a number. Here is the part itself:

http://allelectronics.com/index.php?page=seek&id[m]=pattern&id[q]=cheater+cord&x=0&y=0

This will probably cost a bit of money. Maybe buy a few extra things while you're on the website, HI!

Remember that the 1410 keyer was designed for 120V as I recall.

Joe

--- In DrakeRadio@yahoogroups.com, "oh6nt" <oatpower@...> wrote:
>
> Hey Joe;
>
> Sorry to say, but I don't really know what U mean by "cheater cord" - As you might know we use 230 V mains here, so we have no plugs/sockets with those dimension in the junk box... Maybe someone can supply one of those if they get compensation by some $$ (paypal?)
>
> Thomas / OH6NT
>

12199. Re: [DrakeRadio] R4B intermittent passband

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 22:34:50 UTC
From: Steve Wedge
Topic: 12192 Message: 12199

John -

Look at the back of the PBT box whilst turning the PBT knob. All four slugs in the square arrangement should go in and out. If they don't move or only move after a delay then you'll need to take the box apart, clean and re-grease the mechanism. The slug carriage pulls straight out once you've removed the rear cover (you'll have to break two solder joints and remove some screws).

The slug carriage is under slight spring tension and when the grease is fresh it moves freely.

If you have Garey's CD, it's in the "Misc" Folder, "PB Tuner Mechanical".

HTH,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: jnminni@...
Sent: Monday, February 25, 2013 1:42 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] R4B intermittent passband

My R4B has developed a new "opportunity" for me to work on. The passband tuning has developed an intermittency similar to how a dirty pot would sound when you wriggle the knob. Now I think that inside that passband tuning box there is just a slug that moves in and out of an inductor. So I don't know how to begin with this. Possibly a broken wire or loose connection inside the box would cause this. I suppose that it is also possible that dirty contacts in the bandwidth switch (that shares a concentric shaft with the passband tuning) could be the problem, but really it seems more like it is the passband tuning itself. How would I begin to work on this? How difficult is it to get that passband tuning enclosure apart and, more importantly, how difficult to get it back together.
John/AC8KU

[Non-text portions of this message have been removed]

12200. Re: [DrakeRadio] Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 22:40:41 UTC
From: Steve Wedge
Topic: 12193 Message: 12200

Thomas, can you get adaptors at your local electronics store? I don't know if you have Radio Shack there (I think I've seen one in Germany, but that was years ago), but they sell them. I'm assuming you have the typical Continental receptacle like they have in France and Germany...

You will still need to make sure you either have the ability to move the transformer primaries or have a step-down from 230 to 120.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: oh6nt
Sent: Monday, February 25, 2013 2:20 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Slightly off-topic: Heathkit keyer power plug

Hey Joe;

Sorry to say, but I don't really know what U mean by "cheater cord" - As you might know we use 230 V mains here, so we have no plugs/sockets with those dimension in the junk box... Maybe someone can supply one of those if they get compensation by some $$ (paypal?)

Thomas / OH6NT

--- In DrakeRadio@yahoogroups.com, "toptyp19" wrote:
>
> Hi Thomas-
>
> I don't know if you can find them in Finland but the old TV cheater
> cords will fit perfectly.
>
> Joe-WA9LAE
>

[Non-text portions of this message have been removed]

12201. RE: [DrakeRadio] Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-25 23:04:12 UTC
From: Terrell Hamilton
Topic: 12193 Message: 12201

Thomas - I just looked at mine, and like I thought, it has one of those standard two prong plugs like TV's used to have - not sure what it's called, but quite common. Used on small appliances as well.

Terry K7WLD

Hello list.

Have a refurbished Heathkit HD-1410 Electronic keyer, but miss the power cord... Can anyone tell me the type of the mains female plug that should go into the back of the unit, and where I could obtain such a plug?

OH6NT / Thomas

.

Image removed by sender.

[Non-text portions of this message have been removed]

12202. Re: [DrakeRadio] Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 02:01:24 UTC
From: Kihwal Lee
Topic: 12181 Message: 12202

Fraser,

I just uploaded it to the group site.

http://groups.yahoo.com/group/DrakeRadio/photos/album/652156698/pic/list

73
Kihwal, K9SUL

From: Fraser <fraser_w3utd@...>
To: DrakeRadio@yahoogroups.com
Sent: Sun, February 24, 2013 9:47:39 PM
Subject: [DrakeRadio] Early AC-3 Power Supply

Does anyone have a schematic of the early AC-3 power supply? The one without can caps on the top, but with all the caps underneath the chassis.

I have one coming, and I'd just like to get replacement caps beforehand.

Thanks,

Fraser, W3UTD

[Non-text portions of this message have been removed]

12203. RE: [DrakeRadio] Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 02:38:06 UTC
From: Terrell Hamilton
Topic: 12181 Message: 12203

Kihwal - Terrific restoration! How did you re-do the copper chassis? What did you use for the letters?

73,

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Kihwal Lee
Sent: Monday, February 25, 2013 6:01 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Early AC-3 Power Supply

Fraser,

I just uploaded it to the group site.

http://groups.yahoo.com/group/DrakeRadio/photos/album/652156698/pic/list

73
Kihwal, K9SUL

From: Fraser fraser_w3utd@... <mailto:fraser_w3utd%40yahoo.co.uk> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Sun, February 24, 2013 9:47:39 PM
Subject: [DrakeRadio] Early AC-3 Power Supply

Does anyone have a schematic of the early AC-3 power supply? The one without can caps on the top, but with all the caps underneath the chassis.

I have one coming, and I'd just like to get replacement caps beforehand.

Thanks,

Fraser, W3UTD

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12204. Replacement cord/plug for a 2-B?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 03:39:20 UTC
From: Jim Lowman
Topic: 12204 Message: 12204

Hello all,

I have a 2-B that I acquired from noted Drake collector Sindre Torp, LA6OP.
It has the European-style plug on the AC cord. /I'm looking for an
American replacement./

Thanks in advance and 73 de Jim - AD6CW

[Non-text portions of this message have been removed]

12205. Re: [DrakeRadio] Re: Slightly off-topic: Heathkit keyer power plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 04:36:02 UTC
From: Mike Bryce
Topic: 12193 Message: 12205

Gang,

this is one case where one size won't fit all.

those 1410 keyers did use a cheater type power cord, but the pin spacing is much closer..I've found that the panasonic power cords work and fit like a glove.

mike, wb8vge

ooh... the power cord for the sb303 and others is a cord used by adding machines as well as other business equipment.

On Mon, Feb 25, 2013 at 2:20 PM, oh6nt <oatpower@...> wrote:

> **
>
>
> Hey Joe;
>
> Sorry to say, but I don't really know what U mean by "cheater cord" - As
> you might know we use 230 V mains here, so we have no plugs/sockets with
> those dimension in the junk box... Maybe someone can supply one of those if
> they get compensation by some $$ (paypal?)
>
> Thomas / OH6NT
>
> --- In DrakeRadio@yahoogroups.com, "toptyp19" wrote:
> >
> > Hi Thomas-
> >
> > I don't know if you can find them in Finland but the old TV cheater
> > cords will fit perfectly.
> >
> > Joe-WA9LAE
> >
>
>
>

--
Mike, WB8VGE
SunLight Energy Systems
The Heathkit Shop
http://www.theheathkitshop.com/

J e e p
o|||||||o

[Non-text portions of this message have been removed]

12206. Re: TR7 Transmitt ISSue

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 18:25:03 UTC
From: w9dz
Topic: 12035 Message: 12206

My TR7 has developed the same problem. Normal output on CW. AM carrier but no modulation. All boards pulled, cleaned with Deoxit and reinstalled. Connection from mic connector to exciter board contact OK. VOX isn't working either. I have tried a different mic. No joy.

Any ideas? Exciter board problem?

Allen, W9DZ

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
>
> The first step in troubleshooting any sudden 7-line failure is to re-seat all
> of the plug-in circuit boards (don't forget the boards under the DR-7). The
> Molex connectors get dirty/oxidized over time, and cause all sorts of
> interesting problems. Cleaning the connectors and/or sparing application of
> DeOxit is not a bad idea at this point. While you are in there, make sure all
> of the grounding fingers are making good contact, and the screws on the shield
> covers should be snug (but not over-tight, they are easy to strip).
>
> Of course, the relay is a good point to check as well, but they seem to be
> pretty reliable.
>
> There's a lot of good TR-7 info on wb4hfn.com, if you haven't been there yet.
>
> 73
>
> -Jim
> NU0C
>
> On Sat, 16 Feb 2013 13:46:27 -0000, Joe wrote:
>
> >My TR7 has suddenly stopped transmitting I can key the mike but it does not pass any audio. I get virtually no meter deflection. I tried my Keyer as well with no transmit. I don't want to take my golden screwdriver to it without having some clue as to where to start looking. My first thought would be the the antenna change over relay. I can hear it engage but perhaps it is not fully engaging? Anyone have some pointers or suggestions?
> >Joe N9JCQ
> >
> >
>
> --
> "There's something out of place ☐ let's go and poke it with a stick." ☐ The Doctor, "Amy's Choice"
>

12207. Re: Slightly off-topic: Heathkit keyer power plug - Solved!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-26 19:36:42 UTC
From: oh6nt
Topic: 12193 Message: 12207

Hello again. Thanks to all for answers. I've managed to find a suitable cord from a gadget delivered with an US cord, which is a snug fit, so the keyer actually works now. The plug is not the original, but the original would be hard to find.

Someone warned that the unit ia wired for 115 Vac, but that is changeable by a jumper on the PCB. And, since somebody has nicked the original transformer, the new one (found in a PC speaker system) works just fine on 230 Vac. Fortunately it had same mech specs that the original...

Hava a good time with your Green Lines and Drakes!
It's good to be green - Get a Heathkit!! :-)

OH6NT / Thomas

--- In DrakeRadio@yahoogroups.com, "oh6nt" <oatpower@...> wrote:
>
> Hello list.
>
> Have a refurbished Heathkit HD-1410 Electronic keyer, but ....
>
> OH6NT / Thomas
>

12208. Re: [DrakeRadio] Re: TR7 Transmitt ISSue

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 01:30:59 UTC
From: Jim Shorney
Topic: 12035 Message: 12208

Could be. The exciter boar is where all the transmit audio happens. It's possible that the small coax cable from the mic connector to the audio board is shorted. The mic gain pot is also connected to the audio board.

73

-Jim
NU0C

On Tue, 26 Feb 2013 18:25:03 -0000, w9dz wrote:

>My TR7 has developed the same problem. Normal output on CW. AM carrier but no modulation. All boards pulled, cleaned with Deoxit and reinstalled. Connection from mic connector to exciter board contact OK. VOX isn't working either. I have tried a different mic. No joy.
>
>Any ideas? Exciter board problem?
>
>Allen, W9DZ

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12209. Drake Cabinet Painting - Hartzell Manufacturing

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 15:22:10 UTC
From: Paul Christensen
Topic: 12209 Message: 12209

This morning, I contacted Hartzell to inquire about Drake cabinet painting. About a year ago, a message appeared on one of the mail boards that they were discontinuing this service. Thinking perhaps they had reconsidered, their customer service manager just confirmed they will no longer paint our Drake cabinets. I suppose for the little financial return on the work involved, it was no longer viable.

I know this could shopped around locally, but would like to use someone with experience and who knows how to replicate the Drake cabinet finish. Thanks!

Paul, W9AC

[Non-text portions of this message have been removed]

12210. Re: [DrakeRadio] Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 15:56:59 UTC
From: Chgypsy@...
Topic: 12210 Message: 12210

w9ac@... writes:

I know this could shopped around locally, but would like to use someone with experience and who knows how to replicate the Drake cabinet finish. Thanks! Paul, W9AC
Presuming you are talking about black, whether spackled (bumpy) , or plain. I have no experience with the 7 series gray. The 7 line black straight paint cabinet replacements were exactly that, see below.

The black put out by Krylon worked very nicely. This was at the time a "semi flat" The needle that did not twist for vertical & horizontal spray. For straight paint 2 to 3 thin coats. For the spackled you needed a couple of cans. Take a needle and poke into the spray jet just enough to put out a not large spittle of paint...this takes some work and practice on something (several times) The spackle is your first coat. Now do a couple of thin straight coats.
Good luck, Carl wd8nhk

[Non-text portions of this message have been removed]

12211. RE: [DrakeRadio] Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 16:46:59 UTC
From: Terrell Hamilton
Topic: 12210 Message: 12211

Hi, Carl - When you say to poke the needle into the spray jet, do you mean to enlarge the hole in the spray top button, or actually interrupt the paint flow while holding the needle in place?

(this sounds like a "duh" kind of question, I know...)

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Chgypsy@...
Sent: Wednesday, February 27, 2013 7:57 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake Cabinet Painting

w9ac@... <mailto:w9ac%40arrl.net> writes:

I know this could shopped around locally, but would like to use someone with experience and who knows how to replicate the Drake cabinet finish. Thanks! Paul, W9AC
Presuming you are talking about black, whether spackled (bumpy) , or plain. I have no experience with the 7 series gray. The 7 line black straight paint cabinet replacements were exactly that, see below.

The black put out by Krylon worked very nicely. This was at the time a "semi flat" The needle that did not twist for vertical & horizontal spray. For straight paint 2 to 3 thin coats. For the spackled you needed a couple of cans. Take a needle and poke into the spray jet just enough to put

out a not large spittle of paint...this takes some work and practice on something (several times) The spackle is your first coat. Now do a couple of

thin straight coats.
Good luck, Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12212. Re: [DrakeRadio] Drake Cabinet Painting - Hartzell Manufacturing

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 16:50:57 UTC
From: Paul Kraemer
Topic: 12209 Message: 12212

Paul
I have done it and gaurantee the results but the round trip shipping is
going to be the big cost
Paul K0UYA
----- Original Message -----
From: "Paul Christensen" <w9ac@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, February 27, 2013 9:22 AM
Subject: [DrakeRadio] Drake Cabinet Painting - Hartzell Manufacturing

> This morning, I contacted Hartzell to inquire about Drake cabinet
> painting. About a year ago, a message appeared on one of the mail boards
> that they were discontinuing this service. Thinking perhaps they had
> reconsidered, their customer service manager just confirmed they will no
> longer paint our Drake cabinets. I suppose for the little financial
> return on the work involved, it was no longer viable.
>
> I know this could shopped around locally, but would like to use someone
> with experience and who knows how to replicate the Drake cabinet finish.
> Thanks!
>
> Paul, W9AC
>
>
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12213. Re: [DrakeRadio] Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 16:58:13 UTC
From: <pulsarxp@...>
Topic: 12210 Message: 12213

If you are going to do this, the original paint was done in one application and Sherwin Williams paint was used called Polain. To try and replicate this the base coat needs to be sprayed with black SATIN. Then the speckled paint needs to be black gloss.
In other words the sheen is not the same between the base black and the speckled black.

Lee, w0vt

[Non-text portions of this message have been removed]

12214. Re: [DrakeRadio] Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 17:09:33 UTC
From: Barry
Topic: 12210 Message: 12214

I believe the product is "Polane". The company I used to work for manufactured large punch presses and most of it was speckle painted this way and I believe it was with this product.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: pulsarxp@...
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, February 27, 2013 10:58:13 AM
> Subject: Re: [DrakeRadio] Drake Cabinet Painting
>
>
> If you are going to do this, the original paint was done in one
> application and Sherwin Williams paint was used called Polain. To
> try and replicate this the base coat needs to be sprayed with black
> SATIN. Then the speckled paint needs to be black gloss.
> In other words the sheen is not the same between the base black and
> the speckled black.
>
> Lee, w0vt
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12215. Re: [DrakeRadio] Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 18:56:27 UTC
From: Chgypsy@...
Topic: 12210 Message: 12215

hamilter@... writes:

Hi, Carl - When you say to poke the needle into the spray jet, do you mean to enlarge the hole in the spray top button,
Yes to the above. First time I did it with a straight pin and made the hole to big. Suggest enlarging just a bit at a time until you are happy with what comes out. If you look at Drake spackle it is not very large droplets. You will be consuming more carrier for x amount of paint.

An in my opinion critical point that I don't know exactly how to say is my mixing schedule which is about shake the can up after typically one surface paint IE I paint the top of a TR4 cabinet and then shake the can again... Carl wd8nhk

[Non-text portions of this message have been removed]

12216. Re: [DrakeRadio] Looking for

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-27 22:34:03 UTC
From: Chgypsy@...
Topic: 12216 Message: 12216

Hi Garey,
Has anyone heard from Charlie Talbot K3ICH lately? Or know how to get in touch with? He used to have TR7 parts and I was looking in my files for his email address. Appears he no longer is involved with Upay.

Perhaps you have a spare SL 500 or maybe even an SL 1000 crystal filter running around that you'd like to dispose of?
For that matter any parts running around for a CS7 antenna switch ...for the remote box.

Unfortunately I am in the prize booth at the Dayton Hamvention this year so will probably not have bunchs of time to cruise the flea market. But....
Anything you will be looking for?
Carl wd8nhk

[Non-text portions of this message have been removed]

12217. Re: [DrakeRadio] Looking for

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 01:45:28 UTC
From: Joe Pyles
Topic: 12216 Message: 12217

Charlie is still on ebay he has a few items listed right now. he's
fixit-fox on ebay. his email address is pincon@....

73, Joe KC9LAD

At 05:34 PM 2/27/2013, you wrote:
>Hi Garey,
>Has anyone heard from Charlie Talbot K3ICH lately? Or know how to get in
>touch with? He used to have TR7 parts and I was looking in my files for
>his email address. Appears he no longer is involved with Upay.
>
>Perhaps you have a spare SL 500 or maybe even an SL 1000 crystal filter
>running around that you'd like to dispose of?
>For that matter any parts running around for a CS7 antenna switch ...for
>the remote box.
>
>Unfortunately I am in the prize booth at the Dayton Hamvention this year so
>will probably not have bunchs of time to cruise the flea market. But....
>Anything you will be looking for?
>Carl wd8nhk

[Non-text portions of this message have been removed]

12218. Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:10:07 UTC
From: mvgilger
Topic: 12210 Message: 12218

Paul,
You can refinish these yourself. The procedure is written up on WB4HFN.COM web site. The direct link is:

http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm

Have fun.
73's,
Mark, WB0IQK

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
>
>
> w9ac@... writes:
>
> I know this could shopped around locally, but would like to use someone
> with experience and who knows how to replicate the Drake cabinet finish.
> Thanks! Paul, W9AC
> Presuming you are talking about black, whether spackled (bumpy) , or plain.
> I have no experience with the 7 series gray. The 7 line black straight
> paint cabinet replacements were exactly that, see below.
>
> The black put out by Krylon worked very nicely. This was at the time a
> "semi flat" The needle that did not twist for vertical & horizontal spray.
> For straight paint 2 to 3 thin coats. For the spackled you needed a
> couple of cans. Take a needle and poke into the spray jet just enough to put
> out a not large spittle of paint...this takes some work and practice on
> something (several times) The spackle is your first coat. Now do a couple of
> thin straight coats.
> Good luck, Carl wd8nhk
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

12219. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:19:19 UTC
From: Paul Kraemer
Topic: 12210 Message: 12219

As I have pointed out numerous times to members on this reflector and others

(1) The specified paint #1613 is no longer available and the Krylon recommended "same as" is NOT same as
(2) Drilling out the present day EZ touch nozzles does NOT work like it did on the "old fashioned" nozzles

The internet is a wonderful place full of information. Too bad it does not self purge out of date information

Paul K0UYA

----- Original Message -----
From: "mvgilger" <mgilger@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 9:10 AM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

> Paul,
> You can refinish these yourself. The procedure is written up on WB4HFN.COM
> web site. The direct link is:
>
> http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
>
> Have fun.
> 73's,
> Mark, WB0IQK
>
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>>
>>
>>
>> w9ac@... writes:
>>
>> I know this could shopped around locally, but would like to use someone
>> with experience and who knows how to replicate the Drake cabinet finish.
>> Thanks! Paul, W9AC
>> Presuming you are talking about black, whether spackled (bumpy) , or
>> plain.
>> I have no experience with the 7 series gray. The 7 line black straight
>> paint cabinet replacements were exactly that, see below.
>>
>> The black put out by Krylon worked very nicely. This was at the time a
>> "semi flat" The needle that did not twist for vertical & horizontal
>> spray.
>> For straight paint 2 to 3 thin coats. For the spackled you needed a

>> couple of cans. Take a needle and poke into the spray jet just enough
>> to put
>> out a not large spittle of paint...this takes some work and practice on
>> something (several times) The spackle is your first coat. Now do a
>> couple of
>> thin straight coats.
>> Good luck, Carl wd8nhk
>>
>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12220. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:21:28 UTC
From: Paul Christensen
Topic: 12210 Message: 12220

Mark & All...

Many thanks for the information provided during the past couple days.

73,

Paul

----- Original Message -----
From: mvgilger
To: DrakeRadio@yahoogroups.com
Sent: Thursday, February 28, 2013 10:10 AM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

Paul,
You can refinish these yourself. The procedure is written up on WB4HFN.COM web site. The direct link is:

http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm

Have fun.
73's,
Mark, WB0IQK

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
>
>
> w9ac@... writes:
>
> I know this could shopped around locally, but would like to use someone
> with experience and who knows how to replicate the Drake cabinet finish.
> Thanks! Paul, W9AC
> Presuming you are talking about black, whether spackled (bumpy) , or plain.
> I have no experience with the 7 series gray. The 7 line black straight
> paint cabinet replacements were exactly that, see below.
>
> The black put out by Krylon worked very nicely. This was at the time a
> "semi flat" The needle that did not twist for vertical & horizontal spray.
> For straight paint 2 to 3 thin coats. For the spackled you needed a
> couple of cans. Take a needle and poke into the spray jet just enough to put
> out a not large spittle of paint...this takes some work and practice on
> something (several times) The spackle is your first coat. Now do a couple of
> thin straight coats.
> Good luck, Carl wd8nhk
>
>

>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

12221. Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:46:30 UTC
From: harderr
Topic: 12210 Message: 12221

Et all,

In terms of painting technique, the WB4HFN web site offers cabinet painting procedures via this link:
http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm

Provided are Krylon spray paint part numbers, drill bit size (for the purpose of modifying the spray nozzle), sand paper grit, etc.

Hope this is helpful!

73,

RichardHarder

ars WA4FUU

[Non-text portions of this message have been removed]

12222. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:50:47 UTC
From: k3xr@...
Topic: 12210 Message: 12222

Have used the WB4FHN method to great success. There is a photo of a TR4CWrit on my QRZ.COM site that I restored using this method. DAN, K3XR

----- Original Message -----

From: "harderr" <harderr@bellsouth.net>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, February 28, 2013 10:46:30 AM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

Et all,

In terms of painting technique, the WB4HFN web site offers cabinet painting procedures via this link:
http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm

Provided are Krylon spray paint part numbers, drill bit size (for the purpose of modifying the spray nozzle), sand paper grit, etc.

Hope this is helpful!

73,

RichardHarder

ars WA4FUU

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12223. Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 15:21:42 UTC
From: slowcountry1
Topic: 12223 Message: 12223

About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?

Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.

As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that it works or are there better way to approach this?

Thanks,

Doug

12224. Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 16:33:10 UTC
From: slowcountry1
Topic: 12224 Message: 12224

When I set the selector switch to cal, I get the expected tone at 100Hz intervals however, I do not get a zero or null I can adjust the dial to. I get the tone, adjust the dial just to the right of the tone, where I here nothing. If I rotate the dial higher I do not get a tone but If I rotate the dial lower I get the tone. I was expecting a null point in between two tones to calibrate the dial to. Am I doing this completely wrong or do I have an issue with the calibration tone?

Thanks,

Doug

12225. Re: [DrakeRadio] Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 16:43:34 UTC
From: Steve Wedge
Topic: 12224 Message: 12225

Doug try switching sidebands. There's no pbt on the transceivers, iirc.

73,

Steve Wedge, W1ES/4
On I-95 near Melbourne FL

Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 28, 2013, at 11:33 AM, "slowcountry1" <dcoffman@...> wrote:

> When I set the selector switch to cal, I get the expected tone at 100Hz intervals however, I do not get a zero or null I can adjust the dial to. I get the tone, adjust the dial just to the right of the tone, where I here nothing. If I rotate the dial higher I do not get a tone but If I rotate the dial lower I get the tone. I was expecting a null point in between two tones to calibrate the dial to. Am I doing this completely wrong or do I have an issue with the calibration tone?
>
> Thanks,
>
> Doug
>
>

[Non-text portions of this message have been removed]

12226. Re: [DrakeRadio] Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 16:47:54 UTC
From: Steve Wedge
Topic: 12223 Message: 12226

Never heard of the chassis lettering coming off. I put mine (especially rigs that belonged to smokers) in the kitchen sink, spray w simple green and rinse. You have to remove the front panel, PTO and tubes.

Not for the faint of heart bit it results in as good-looking a radio as you'll get.

73,

Steve Wedge, W1ES/4
Still on I-95 in FL
XYL driving.

Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 28, 2013, at 10:21 AM, "slowcountry1" <dcoffman@...> wrote:

> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
>
> Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
>
> As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that it works or are there better way to approach this?
>
> Thanks,
>
> Doug
>
>

[Non-text portions of this message have been removed]

12227. Re: [DrakeRadio] Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 16:52:56 UTC
From: Richard Knoppow
Topic: 12224 Message: 12227

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 8:33 AM
Subject: [DrakeRadio] Drake TR-4CW dial calibration

> When I set the selector switch to cal, I get the expected
> tone at 100Hz intervals however, I do not get a zero or
> null I can adjust the dial to. I get the tone, adjust the
> dial just to the right of the tone, where I here nothing.
> If I rotate the dial higher I do not get a tone but If I
> rotate the dial lower I get the tone. I was expecting a
> null point in between two tones to calibrate the dial to.
> Am I doing this completely wrong or do I have an issue
> with the calibration tone?
>
> Thanks,
>
> Doug
>
First of all the neon PTO indicator; these lamps wear
out, the trigger voltage goes up. The cure is to replace the
lamp. They are available from the various lamp sources on
the web and are not expensive.
You should be able to get a zero-beat from the
calibrator. Describe what happens as you tune across its
markers, do you get a tone of varying pitch? You should but
finding the exact zero-beat may be difficult because the
calibrator signal will be at the margin of the filter. You
will NOT get a null on the tuning meter because the
calibrator signal is like any other carrier, its there, what
you get is an audio zero-beat.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12228. Re: [DrakeRadio] Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:00:52 UTC
From: Garey Barrell
Topic: 12223 Message: 12228

Doug -

Welcome to the group!

I believe what you are seeing is the result of eight years of storage in less than ideal conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the small bottle
with the needle applicator top. This allows you to apply strong deoxidizer right on the contacts
ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic wafers,causingcontact alignment problems, but I've not seen that with any DeoxIT products. Spraying
is still a bad idea, because any overspray serves to collect dust and even form carbonized leaky paths.

The power switch may be repairable. They CAN be removed and contacts cleaned, etc. Afailure of the
camming mechanism may be fatal. Does the power switch 'click' when operated? If it does, it can
probably be repaired.

Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any cleaning
method is going to do the same. I would just clean it the best I could, and then replace the
chassis lettering with dry transfer lettering.

Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does NOT include
the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300 Hz. If you
crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
one way, you will hear either 300 - 2700 Hz beat, -OR- 2700 - 300 Hz, depending upon which way
you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
will hear the opposite of the above. Think of the letter "M" with the zero beat in the center
trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of the "M".

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
>
> Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
>
> As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that it works or are there better way to approach this?
>
> Thanks,
>
> Doug
>
>

12229. Re: Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:12:54 UTC
From: slowcountry1
Topic: 12224 Message: 12229

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, February 28, 2013 8:33 AM
> Subject: [DrakeRadio] Drake TR-4CW dial calibration
>
>
> > When I set the selector switch to cal, I get the expected
> > tone at 100Hz intervals however, I do not get a zero or
> > null I can adjust the dial to. I get the tone, adjust the
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> > Am I doing this completely wrong or do I have an issue
> > with the calibration tone?
> >
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> >
> > Doug
> >
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> out, the trigger voltage goes up. The cure is to replace the
> lamp. They are available from the various lamp sources on
> the web and are not expensive.
> You should be able to get a zero-beat from the
> calibrator. Describe what happens as you tune across its
> markers, do you get a tone of varying pitch? You should but
> finding the exact zero-beat may be difficult because the
> calibrator signal will be at the margin of the filter. You
> will NOT get a null on the tuning meter because the
> calibrator signal is like any other carrier, its there, what
> you get is an audio zero-beat.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Richard,

I am not understanding the lamp and trigger voltage comment and how that applies to the Cal issue, can you please elaborate?

If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone can be found above 28.300. I can rotate the VFO through the tone and I do not find a null to zero on. If I change to USB, the tone is found below 28.300, when I rotate the VFO through the tone, again no null is found, the pitch varies as does the S meter. It sounds like it tries to make a tone on either side but it is almost non audible and would not allow for adjustment via the ear.

If I switch to CW and transmit, I have adjusted the dial to align with 28.300 on my hand held MFJ freq counter. Again with the dial on 28.300 lsb tone is above and usb tone is below. Not two tones or a null in the tone. I have tuned very very slowly to see if I was just missing it but the null is not there.

12230. Re: [DrakeRadio] Re: Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:19:22 UTC
From: Barry
Topic: 12224 Message: 12230

I think he was referring to the intermittent band lights.

Barry - N4BUQ

> Richard,
>
> I am not understanding the lamp and trigger voltage comment and how
> that applies to the Cal issue, can you please elaborate?
>
> If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone
> can be found above 28.300. I can rotate the VFO through the tone
> and I do not find a null to zero on. If I change to USB, the tone
> is found below 28.300, when I rotate the VFO through the tone, again
> no null is found, the pitch varies as does the S meter. It sounds
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> audible and would not allow for adjustment via the ear.
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> on 28.300 lsb tone is above and usb tone is below. Not two tones or
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> just missing it but the null is not there.
>
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> Yahoo! Groups Links
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12231. Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:24:26 UTC
From: slowcountry1
Topic: 12223 Message: 12231

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Welcome to the group!
>
> I believe what you are seeing is the result of eight years of storage in less than ideal
> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you
are
> seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the
small bottle
> with the needle applicator top. This allows you to apply strong deoxidizer right on the
contacts
> ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic
> wafers,causingcontact alignment problems, but I've not seen that with any DeoxIT
products. Spraying
> is still a bad idea, because any overspray serves to collect dust and even form
carbonized leaky paths.
>
> The power switch may be repairable. They CAN be removed and contacts cleaned, etc.
Afailure of the
> camming mechanism may be fatal. Does the power switch 'click' when operated? If it does,
it can
> probably be repaired.
>
> Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any
cleaning
> method is going to do the same. I would just clean it the best I could, and then replace
the
> chassis lettering with dry transfer lettering.
>
> Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does
NOT include
> the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300
Hz. If you
> crank up the gain you might be able to hear below 300. However, if you tune across the
Calibrator
> one way, you will hear either 300 - 2700 Hz beat, -OR- 2700 - 300 Hz, depending upon
which way
> you're tuning. If you switch tothe 'other' sideband, and tune through in the same
direction, you
> will hear the opposite of the above. Think of the letter "M" with the zero beat in the
center
> trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of
the "M".

>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
> >
> > Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
> >
> > As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that it works or are there better way to approach this?
> >
> > Thanks,
> >
> > Doug
> >
> >
>
Gary,

It is rather disheartening in that the chassis is not pitted, oxidized etc. It has been in my ham shack (upstairs unused bedroom) in a stable environment. It is not really dirty just a light film of dust; but yellowing that I assume is old cigarette smoke related. Very easy to wipe off however; the lettering comes off with the wiping of the finger. How do you re-label it as you described? Is there a website or something you have written?

The power switch clicks as expected and has no sign of burning. I have 3 other T4 T4Cw-rit that I purchased as projects (never touched) their power switches all have obvious burns external and are open. So much for robbing peter to pay Paul.

I posted my findings on the zero beat below;

If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone can be found above 28.300. I can rotate the VFO through the tone and I do not find a null to zero on. If I change to USB, the tone is found below 28.300, when I rotate the VFO through the tone, again no null is found, the pitch varies as does the S meter. It sounds like it tries to make a tone on either side but it is almost non audible and would not allow for adjustment via the ear.

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12232. Re: Drake TR-4CW dial calibration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:32:17 UTC
From: slowcountry1
Topic: 12224 Message: 12232

--- In DrakeRadio@yahoogroups.com, Barry <n4buq@...> wrote:
>
> I think he was referring to the intermittent band lights.
>
> Barry - N4BUQ
>
> > Richard,
> >
> > I am not understanding the lamp and trigger voltage comment and how
> > that applies to the Cal issue, can you please elaborate?
> >
> > If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone
> > can be found above 28.300. I can rotate the VFO through the tone
> > and I do not find a null to zero on. If I change to USB, the tone
> > is found below 28.300, when I rotate the VFO through the tone, again
> > no null is found, the pitch varies as does the S meter. It sounds
> > like it tries to make a tone on either side but it is almost non
> > audible and would not allow for adjustment via the ear.
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> > If I switch to CW and transmit, I have adjusted the dial to align
> > with 28.300 on my hand held MFJ freq counter. Again with the dial
> > on 28.300 lsb tone is above and usb tone is below. Not two tones or
> > a null in the tone. I have tuned very very slowly to see if I was
> > just missing it but the null is not there.
> >
> >
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> > ------------------------------------
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> > Yahoo! Groups Links
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>
Ok, that makes sense now, I wasn't making a connection on that one.... I removed the lamps and rubbed the lead base on my blue jeans just enough to polish them up. Seated and re-seated them a couple of time and viola, the now both work. The bulb and socket looked great but apparently there was a slight oxidation on the lead that wasn't allowing them to work properly. Getting the sockets out with my big hands was a task...

12233. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:34:49 UTC
From: Chgypsy@...
Topic: 12210 Message: 12233

In a message dated 2/28/2013 10:21:27 A.M. Eastern Standard Time,
elespe@... writes:

As I have pointed out numerous times to members on this reflector and
others

(1) The specified paint #1613 is no longer available and the Krylon
recommended "same as" is NOT same as
(2) Drilling out the present day EZ touch nozzles does NOT work like it
did
on the "old fashioned" nozzles

The internet is a wonderful place full of information. Too bad it does not
self purge out of date information

Paul K0UYA

----- Original Message -----
From: "mvgilger" <mgilger@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 9:10 AM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

> Paul,
> You can refinish these yourself. The procedure is written up on
WB4HFN.COM
> web site. The direct link is:
>
> http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
>
> Have fun.
> 73's,
> Mark, WB0IQK
>
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>>
>>
>>
>> w9ac@... writes:
>>
>> I know this could shopped around locally, but would like to use someone
>> with experience and who knows how to replicate the Drake cabinet
finish.
>> Thanks! Paul, W9AC
>> Presuming you are talking about black, whether spackled (bumpy) , or
>> plain.

>> I have no experience with the 7 series gray. The 7 line black straight
>> paint cabinet replacements were exactly that, see below.
>>
>> The black put out by Krylon worked very nicely. This was at the time
a
>> "semi flat" The needle that did not twist for vertical & horizontal
>> spray.
>> For straight paint 2 to 3 thin coats. For the spackled you needed a
>> couple of cans. Take a needle and poke into the spray jet just enough

>> to put
>> out a not large spittle of paint...this takes some work and practice on
>> something (several times) The spackle is your first coat. Now do a
>> couple of
>> thin straight coats.
>> Good luck, Carl wd8nhk
>>
>>
>>
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>>
>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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Yahoo! Groups Links

[Non-text portions of this message have been removed]

12234. Re: [DrakeRadio] Drake lettering

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:41:59 UTC
From: Chgypsy@...
Topic: 12234 Message: 12234

w1es1982@... writes:

Never heard of the chassis lettering coming off.
Oh yes, my old R4 did too. Old age like the owner. Carl wd8nhk
Come to think of it I had a TR3 that lost the tube lettering on one side
while cleaning with a damp rag.

[Non-text portions of this message have been removed]

12235. Re: [DrakeRadio] Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 17:57:04 UTC
From: Garey Barrell
Topic: 12223 Message: 12235

Doug -

Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear from ~300 - 2700
Hz on either side of the zero. The '300 -0 - 300' Hz range is outside the filter passband(s) and so
not heard.

You used to be able to purchase lettering packets designed for lettering front panels of home brew
equipment. The idea is that the letters are a waxy substance adhered to a cover sheet. You placed
the letter or word whereyou wanted it on the panel, rubbed it with a burnishing tool, transferring
the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
protect it.

A better idea available today is at

<http://www.hyatts.com/art/dry-transfer-letters-1.5303>

this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
then generateyour own titles. (Tube numbers?)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
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>> Welcome to the group!
>>
>> I believe what you are seeing is the result of eight years of storage in less than ideal
>> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are
>> seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the small bottle

>> with the needle applicator top. This allows you to apply strong deoxidizer right on the contacts
>> ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic
>> wafers,causingcontact alignment problems, but I've not seen that with any DeoxIT products. Spraying
>> is still a bad idea, because any overspray serves to collect dust and even form carbonized leaky paths.
>>
>> The power switch may be repairable. They CAN be removed and contacts cleaned, etc. Afailure of the
>> camming mechanism may be fatal. Does the power switch 'click' when operated? If it does, it can
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>> Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any cleaning
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>> chassis lettering with dry transfer lettering.
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>> Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does NOT include
>> the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300 Hz. If you
>> crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
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>> you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
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>> trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of the "M".
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
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>>
>> slowcountry1 wrote:
>>> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work

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>>> Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
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> Gary,
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>
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> Yahoo! Groups Links

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12236. Re: [DrakeRadio] Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 18:09:13 UTC
From: Steve Wedge
Topic: 12223 Message: 12236

On the road right now - do you know if they make this in white, Garey?

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Feb 28, 2013, at 12:57 PM, Garey Barrell <k4oah@...> wrote:

> Doug -
>
> Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
> letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear from ~300 - 2700
> Hz on either side of the zero. The '300 -0 - 300' Hz range is outside the filter passband(s) and so
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> the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
> protect it.
>
> A better idea available today is at
>
> http://www.hyatts.com/art/dry-transfer-letters-1.5303>
>
> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
> then generateyour own titles. (Tube numbers?)
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@...m, Garey Barrell wrote:
> >> Doug -

> >>
> >> Welcome to the group!
> >>
> >> I believe what you are seeing is the result of eight years of storage in less than ideal
> >> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are
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> >> 73, Garey - K4OAH
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> > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12237. Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 18:11:55 UTC
From: slowcountry1
Topic: 12223 Message: 12237

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
> letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear from ~300 - 2700
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> the letter or word whereyou wanted it on the panel, rubbed it with a burnishing tool, transferring
> the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
> protect it.
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> A better idea available today is at
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> <http://www.hyatts.com/art/dry-transfer-letters-1.5303>
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> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
> then generateyour own titles. (Tube numbers?)
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> >> seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the small bottle
> >> with the needle applicator top. This allows you to apply strong deoxidizer right on the contacts
> >> ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic
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Is there value in setting the transceiver in CW-X and monitoring the transmission with a freq counter when finished?

Thanks for your help, again I apologize for my ignorance.

Doug

12238. Re: [DrakeRadio] Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 18:40:33 UTC
From: Garey Barrell
Topic: 12223 Message: 12238

Doug -

Let's try it another way. Let's say youare tuning to a dial frequency of 1,000,000 Hz. If you
being tuning from the lower frequency, up, you will first hear a tone of about 2,700 Hz, and a dial
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73, Garey - K4OAH
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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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12239. Re: Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 18:56:37 UTC
From: Fraser
Topic: 12181 Message: 12239

That's an amazing transformation of the copper chassis. How did you do that?

--- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" <hamilter@...> wrote:
>
> Kihwal - Terrific restoration! How did you re-do the copper chassis? What did you use for the letters?
>
> 73,
>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Kihwal Lee
> Sent: Monday, February 25, 2013 6:01 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Early AC-3 Power Supply
>
>
>
>
>
>
> Fraser,
>
> I just uploaded it to the group site.
>
> http://groups.yahoo.com/group/DrakeRadio/photos/album/652156698/pic/list
>
> 73
> Kihwal, K9SUL
>
> _____
> From: Fraser fraser_w3utd@... <mailto:fraser_w3utd%40yahoo.co.uk> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Sun, February 24, 2013 9:47:39 PM
> Subject: [DrakeRadio] Early AC-3 Power Supply
>
> Does anyone have a schematic of the early AC-3 power supply? The one without can
> caps on the top, but with all the caps underneath the chassis.
>
> I have one coming, and I'd just like to get replacement caps beforehand.
>

> Thanks,
>
> Fraser, W3UTD
>
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> [Non-text portions of this message have been removed]
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12240. R-4B Bias and S-Meter alignment.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 19:18:35 UTC
From: hglent
Topic: 12240 Message: 12240

I had a audio out put problem with the R-4B. The level was low, but occasionally I would hear a burst of hi level audio and back to low.

I got the instruction manual out and started looking for the problem. The AVC wasn't functioning properly. I decided to check the Bias and S-Meter. I started following the steps in 6.4.9. Every time I would go back to step 3 for a final touch up I ran into a Bias adjustment problem. It would change.

I consulted with our Guru of Drake Radio, Garey K4OAH. He gave the following advice; "First, are you using the Drake MS-4 speaker? It's a 4 ohm voice coil, which is what the 4 Line wants to see.

Setup is very straightforward. Section 6.4.9 in the manual. Besure and use a Hi-Z meter 10-11 M input impedance to measure TP2. The little Harbor Freight toymeters will NOT work. Set the -1.32 carefully.

Try step 4 as written, and see if you are pleased with the results. If not ...

Change step 4 to read: "Set RF GAIN control full counter clock-wise and adjust S-Meter SENS control to 60 dB over S-9."

If neither is satisfactory, measure the voltage you are able to reach with the RF GAIN, per the original step 4. You should reach -15V well before full CCW. If not, we may have to go further."

The only thing that was giving me trouble was no place in the manual or in the advice was there mentioned the proper setting of the RF Gain before doing the -1.32 VDC measurement. Again back to Garey. He advised, set RF Gain full CW before doing any adjustments and then follow the directions.

The outcome was perfect operation of the AVC and proper audio levels with plenty of volume on the speaker, plus the S-Meter was working.

Thanks again to Garey for his expertise and outstanding support to us all.

Paul K.
WA0BAG

12241. Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 19:25:24 UTC
From: slowcountry1
Topic: 12223 Message: 12241

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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> Doug -
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> Let's try it another way. Let's say youare tuning to a dial frequency of 1,000,000 Hz. If you
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> >> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
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> >>>> chassis lettering with dry transfer lettering.
> >>>>
> >>>> Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does NOT include
> >>>> the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300 Hz. If you
> >>>> crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
> >>>> one way, you will hear either 300 - 2700 Hz beat, -OR- 2700 - 300 Hz, depending upon which way
> >>>> you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
> >>>> will hear the opposite of the above. Think of the letter "M" with the zero beat in the center
> >>>> trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of the "M".
> >>>>
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
> >>>>>
> >>>>> Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
> >>>>>
> >>>>> As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that

it works or are there better way to approach this?
> >>>>>
> >>>>> Thanks,
> >>>>>
> >>>>> Doug
> >>>>>
> >>>>>
> >>> Gary,
> >>>
> >>> It is rather disheartening in that the chassis is not pitted, oxidized etc. It has been in my ham shack (upstairs unused bedroom) in a stable environment. It is not really dirty just a light film of dust; but yellowing that I assume is old cigarette smoke related. Very easy to wipe off however; the lettering comes off with the wiping of the finger. How do you re-label it as you described? Is there a website or something you have written?
> >>>
> >>> The power switch clicks as expected and has no sign of burning. I have 3 other T4 T4Cw-rit that I purchased as projects (never touched) their power switches all have obvious burns external and are open. So much for robbing peter to pay Paul.
> >>>
> >>> I posted my findings on the zero beat below;
> >>>
> >>> If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone can be found above 28.300. I can rotate the VFO through the tone and I do not find a null to zero on. If I change to USB, the tone is found below 28.300, when I rotate the VFO through the tone, again no null is found, the pitch varies as does the S meter. It sounds like it tries to make a tone on either side but it is almost non audible and would not allow for adjustment via the ear.
> >>>
> >>> If I switch to CW and transmit, I have adjusted the dial to align with 28.300 on my hand held MFJ freq counter. Again with the dial on 28.300 lsb tone is above and usb tone is below. Not two tones or a null in the tone. I have tuned very very slowly to see if I was just missing it but the null is not there.
> >>>
> >>>
> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
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> >>>
> >>>
> >>>
> > Gary,
> >
> > I apologize for my ignorance in advance. If I'm understanding your analogy correctly, if I'm in cal mode and I change to either side band I should not hear any tone on 28.300 but I should start to hear a tone above when in LSB and start to hear a tone below when in USB as I move the VFO?
> >

> > Is there value in setting the transceiver in CW-X and monitoring the transmission with a freq counter when finished?
> >
> > Thanks for your help, again I apologize for my ignorance.
> >
> > Doug
> >
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
> >
>
Gary,

I had done it in the reverse order as you described. I started out at 28.300 LSB, increased in frequency and shortly noticed the tone and returned back to 28.300. I then switched to USB and decreased frequency and shortly noticed the tone and again returned back to 28.200 and adjusted the dial so that no tone is present at 28.300 while in either LSB or USB modes. I have actually done it backwards then.

The next topic I need to ask you about is the plate meter dampening. I just had a 45min QSO on 15M with a gentleman and noticed that the S meter needle was flopping all over the place. When I stop transmitting it rests at Zero however sometimes it will bang back to zero and get stuck below the zero mark and requires a slight tap to put it back on scale. I'm assuming that there is a tiny coil type spring acting as a dampening device? Is this common in older rigs? Is this repairable or is the meter done?

Thanks for all of your assistance.

Doug

12242. Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 19:26:39 UTC
From: slowcountry1
Topic: 12223 Message: 12242

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doug -
> >
> > Let's try it another way. Let's say youare tuning to a dial frequency of 1,000,000 Hz. If you
> > being tuning from the lower frequency, up, you will first hear a tone of about 2,700 Hz, and a dial
> > frequency of 997,300 Hz of the LOWER Sideband. If you continue in the same direction, you will hear
> > the tone decrease in frequency to about 300 Hz, at adial reading of 999,700 Hz. The signal will
> > then 'disappear', tuning through a dial setting of 1,000,000 Hz (zero beat) and then when you reach
> > 1,000,300 Hz you will again hear 300 Hz, this time in the UPPER Sideband. As you continue, the
> > audio tone will increase to about 2,700 Hz again, at a dial setting of 1,002,700Hz and then
> > disappear again.
> >
> > For CW, the Carrier Oscillator is shifted ~800 Hz to place it WITHIN the LSB passband so it can pass
> > throughwith minimal attenuationand become the transmitted signal. As a result, the dial frequency
> > of the transmitter will read about 800 Hz off of the TRUE transmitted frequency.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > slowcountry1 wrote:
> > >
> > > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Doug -
> > >>
> > >> Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
> > >> letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear

from ~300 - 2700
> > >> Hz on either side of the zero. The '300 -0 - 300' Hz range is outside the filter passband(s) and so
> > >> not heard.
> > >>
> > >> You used to be able to purchase lettering packets designed for lettering front panels of home brew
> > >> equipment. The idea is that the letters are a waxy substance adhered to a cover sheet. You placed
> > >> the letter or word whereyou wanted it on the panel, rubbed it with a burnishing tool, transferring
> > >> the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
> > >> protect it.
> > >>
> > >> A better idea available today is at
> > >>
> > >> <http://www.hyatts.com/art/dry-transfer-letters-1.5303>
> > >>
> > >> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
> > >> then generateyour own titles. (Tube numbers?)
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> slowcountry1 wrote:
> > >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >>>> Doug -
> > >>>>
> > >>>> Welcome to the group!
> > >>>>
> > >>>> I believe what you are seeing is the result of eight years of storage in less than ideal
> > >>>> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are
> > >>>> seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the small bottle
> > >>>> with the needle applicator top. This allows you to apply strong deoxidizer right on the contacts
> > >>>> ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic
> > >>>> wafers,causingcontact alignment problems, but I've not seen that with any DeoxIT products. Spraying
> > >>>> is still a bad idea, because any overspray serves to collect dust and even form carbonized leaky paths.
> > >>>>
> > >>>> The power switch may be repairable. They CAN be removed and contacts cleaned, etc.

Afailure of the
> > >>>> camming mechanism may be fatal. Does the power switch 'click' when operated? If it does, it can
> > >>>> probably be repaired.
> > >>>>
> > >>>> Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any cleaning
> > >>>> method is going to do the same. I would just clean it the best I could, and then replace the
> > >>>> chassis lettering with dry transfer lettering.
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> > >>>> Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does NOT include
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> > >>>> crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
> > >>>> one way, you will hear either 300 - 2700 Hz beat, -OR- 2700 - 300 Hz, depending upon which way
> > >>>> you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
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> > >>>>> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
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> > >>>>>
> > >>>>> Thanks,
> > >>>>>
> > >>>>> Doug
> > >>>>>
> > >>>>>
> > >>> Gary,
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> > >>> ------------------------------------
> > >>>
> > >>> Yahoo! Groups Links
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> > >>>
> > > Gary,
> > >
> > > I apologize for my ignorance in advance. If I'm understanding your analogy correctly, if I'm in cal mode and I change to either side band I should not hear any tone on 28.300 but I should start to hear a tone above when in LSB and start to hear a tone below when in

USB as I move the VFO?
> > >
> > > Is there value in setting the transceiver in CW-X and monitoring the transmission with a freq counter when finished?
> > >
> > > Thanks for your help, again I apologize for my ignorance.
> > >
> > > Doug
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> > >
> > >
> > >
> > > ------------------------------------
> > >
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> >
> Gary,
>
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> The next topic I need to ask you about is the plate meter dampening. I just had a 45min QSO on 15M with a gentleman and noticed that the S meter needle was flopping all over the place. When I stop transmitting it rests at Zero however sometimes it will bang back to zero and get stuck below the zero mark and requires a slight tap to put it back on scale. I'm assuming that there is a tiny coil type spring acting as a dampening device? Is this common in older rigs? Is this repairable or is the meter done?
>
> Thanks for all of your assistance.
>
> Doug
>

The second frequency should read 28.300

12243. Re: [DrakeRadio] R-4B Bias and S-Meter alignment.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 19:44:41 UTC
From: Don Cunningham
Topic: 12240 Message: 12243

Paul,

Thank YOU for taking the time to give all of us a synopsis of what symptom you had, and what fixed it. That adds a LOT of value to this list, and I fear a lot who get help don't do that. Well stated!!!! I'll sure add your email to my archives.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12244. Re: [DrakeRadio] Re: Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 21:51:26 UTC
From: Kihwal Lee
Topic: 12181 Message: 12244

It looks better on pictures. I applied copper-colored spray paint after cleaning the surface. The labels were printed on a sheet of transparent film and clear double sided tape was used to attach them. This is NOT restoration. The painted surface is not conductive anymore and the labels can come off, although I made sure it doesn't melt or get loose with the typical surface temperature of TR-3 chassis top. It was only done to the worst of three TR-3's I have.

Kihwal, K9SUL

From: Fraser <fraser_w3utd@...>
To: DrakeRadio@yahoogroups.com
Sent: Thu, February 28, 2013 12:56:44 PM
Subject: [DrakeRadio] Re: Early AC-3 Power Supply

That's an amazing transformation of the copper chassis. How did you do that?

--- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" wrote:
>
> Kihwal - Terrific restoration! How did you re-do the copper chassis? What did
>you use for the letters?
>
> 73,
>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf
>Of Kihwal Lee
> Sent: Monday, February 25, 2013 6:01 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Early AC-3 Power Supply
>
>
>
>
>
>
> Fraser,
>
> I just uploaded it to the group site.
>
> http://groups.yahoo.com/group/DrakeRadio/photos/album/652156698/pic/list
>

> 73
> Kihwal, K9SUL
>
> _____
> From: Fraser fraser_w3utd@... >
> To: DrakeRadio@yahoogroups.com
> Sent: Sun, February 24, 2013 9:47:39 PM
> Subject: [DrakeRadio] Early AC-3 Power Supply
>
> Does anyone have a schematic of the early AC-3 power supply? The one without
>can
>
> caps on the top, but with all the caps underneath the chassis.
>
> I have one coming, and I'd just like to get replacement caps beforehand.
>
> Thanks,
>
> Fraser, W3UTD
>
> [Non-text portions of this message have been removed]
>
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12245. Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 21:54:39 UTC
From: Mark Brueggemann
Topic: 12210 Message: 12245

--- On Thu, 2/28/13, Paul Kraemer> wrote:

> I have done it and gaurantee the results but the round trip
> shipping is going to be the big cost

We're talking just the cabinet shell, right? I would think that could be fairly economically shipped. Maybe some models would require the chassis? Not sure, I'm a newbie to Drakes.

I've successfully duplicated the "speckle" finish with the pin in the nozzle method, on a different brand of radio. I did the speckle with primer and then did a semigloss over that, turned out indistinguishable from factory. I cleaned and kept that nozzle just in case I ever need to get that texture again.

Anyone know gray what matches the TR7 cabinet? I've read about the "sticky" paint and the vinyl covered cabinets. I've got a less than lovingly cared for TR7 that's next in the queue for a refurb. Mine appears to be paint, but isn't sticky.

I'm redoing my 2B and 2BQ cabinets in Rustoleum satin black and as a test, before I sanded and primed I painted a section of it with one half of the original paint area masked. When I took the tape off and compared original and new side by side the color and sheen were as close a match as you could hope for coming out of a can.

BTW, as a follow up to my earlier 2B dial white sheen question, I ended up going with flat white and it turned out perfect. As long as you don't have a 2nd 2B next to it to compare to, I suspect any nuance of difference in "whiteness" or sheen would ever be detected. After 50 years I suspect all of them are in various shades of white anyway. And the white wire I was after I had to settle for stuff the same OD but it's a shade too white. I reached the point of diminishing return to find wire with the right shade of off-white to blend in. I'll leave that to the next guy that rebuilds it.

Mark K5LXP
Albuquerque, NM

12246. Death Caps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 22:01:46 UTC
From: Mark Brueggemann
Topic: 12246 Message: 12246

I've read all about the safety hazard of the 2-wire AC cord configuration and will be installing a 3-wire cord during my 2B restoration.

I have a supply of "real" Y-caps that I can replace the stock .01 ceramics. Is there any value to adding an X-cap or is that superfluous in this application? I don't see the 2B as being especially susceptible to, or generating any EMI but while I'm in there...

Mark K5LXP
Albuquerque, NM

12247. Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 22:37:29 UTC
From: mvgilger
Topic: 12210 Message: 12247

I've been trying to get Ron to post the updated document on his web page (WB4HFN.COM), but I see it's still not there. The Krylon paints you need are:

Krylon #51317 Rubby Brown Primer
Krylon #51613 Satin black paint
Krylon #51601 Gloss black paint

The drill size is still correct in the document, which is a #52 or .063 inch. Works great and get perfect match.

The 51613 Satin black works better than the old #5613 Semi Flat.

73's,
Mark, WB0IQK
--- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
>
> As I have pointed out numerous times to members on this reflector and others
>
> (1) The specified paint #1613 is no longer available and the Krylon
> recommended "same as" is NOT same as
> (2) Drilling out the present day EZ touch nozzles does NOT work like it did
> on the "old fashioned" nozzles
>
> The internet is a wonderful place full of information. Too bad it does not
> self purge out of date information
>
> Paul K0UYA
>
>
>
> ----- Original Message -----
> From: "mvgilger" <mgilger@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, February 28, 2013 9:10 AM
> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>
>
> > Paul,
> > You can refinish these yourself. The procedure is written up on WB4HFN.COM
> > web site. The direct link is:
> >
> > http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
> >
> > Have fun.
> > 73's,
> > Mark, WB0IQK

> >
> > --- In DrakeRadio@yahoogroups.com, Chgypsy@ wrote:
> >>
> >>
> >>
> >> w9ac@ writes:
> >>
> >> I know this could shopped around locally, but would like to use someone
> >> with experience and who knows how to replicate the Drake cabinet finish.
> >> Thanks! Paul, W9AC
> >> Presuming you are talking about black, whether spackled (bumpy) , or
> >> plain.
> >> I have no experience with the 7 series gray. The 7 line black straight
> >> paint cabinet replacements were exactly that, see below.
> >>
> >> The black put out by Krylon worked very nicely. This was at the time a
> >> "semi flat" The needle that did not twist for vertical & horizontal
> >> spray.
> >> For straight paint 2 to 3 thin coats. For the spackled you needed a
> >> couple of cans. Take a needle and poke into the spray jet just enough
> >> to put
> >> out a not large spittle of paint...this takes some work and practice on
> >> something (several times) The spackle is your first coat. Now do a
> >> couple of
> >> thin straight coats.
> >> Good luck, Carl wd8nhk
> >>
> >>
> >>
> >>
> >>
> >> [Non-text portions of this message have been removed]
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12248. Re: [DrakeRadio] Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 22:54:26 UTC
From: Mark Pilant
Topic: 12223 Message: 12248

Hi Doug.

Given my recent experiences with my TR-4 stored in less than ideal conditions, I would suggest using the contact cleaner of your choice (I use Deoxit) on *all* contacts. The switches are obvious but I would also include crystal and tube sockets as well.

A cleaner/lube (as appropriate) would probably be helpful on the various pots.

73

- Mark N1VQW

12249. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 23:38:07 UTC
From: Paul Kraemer
Topic: 12210 Message: 12249

I respectfully disagree

51613 is too shiny, only matches cabinets that have been waxed a lot
In my experience it is easier to start with the present day Krylon 15602 flat (there are only three choices , flat, satin and gloss) and buff it up to the desired lustre. Use the flat for both base and spatter and the spatter will gloss up more being on the top

If you want a closer match to the original 1613 try Dupli-Color 1608 Semi gloss lacquer but be careful what you use for primer or you will have wrinkle finish.

And, the enlarge the hole in the spray tip technique, has not, in my experience with the newer style nozzles, been any walk in the park. You will end up with paint drool all over the can, your fingers and the floor. The only way I have gotten it to work is work over a large sheet of cardboard and get the spatter started satisfactory and continue moving over the project without altering your finger pressure. Difficult to do---cramps my index finger

Just my experiences with black paint in a spray can. Only topic more subjective is what speaker / microphone is best

Paul K0UYA

----- Original Message -----
From: "mvgilger" <mgilger@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 4:37 PM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

> I've been trying to get Ron to post the updated document on his web page
> (WB4HFN.COM), but I see it's still not there. The Krylon paints you need
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> Krylon #51317 Rubby Brown Primer
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> The drill size is still correct in the document, which is a #52 or .063
> inch. Works great and get perfect match.
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> The 51613 Satin black works better than the old #5613 Semi Flat.
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> --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:

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>> As I have pointed out numerous times to members on this reflector and
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>> (1) The specified paint #1613 is no longer available and the Krylon
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>> on the "old fashioned" nozzles
>>
>> The internet is a wonderful place full of information. Too bad it does
>> not
>> self purge out of date information
>>
>> Paul K0UYA
>>
>>
>>
>> ----- Original Message -----
>> From: "mvgilger" <mgilger@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Thursday, February 28, 2013 9:10 AM
>> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>>
>>
>> > Paul,
>> > You can refinish these yourself. The procedure is written up on
>> > WB4HFN.COM
>> > web site. The direct link is:
>> >
>> > http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
>> >
>> > Have fun.
>> > 73's,
>> > Mark, WB0IQK
>> >
>> > --- In DrakeRadio@yahoogroups.com, Chgypsy@ wrote:
>> >>
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>> >>
>> >> w9ac@ writes:
>> >>
>> >> I know this could shopped around locally, but would like to use
>> >> someone
>> >> with experience and who knows how to replicate the Drake cabinet
>> >> finish.
>> >> Thanks! Paul, W9AC
>> >> Presuming you are talking about black, whether spackled (bumpy) , or
>> >> plain.
>> >> I have no experience with the 7 series gray. The 7 line black

>> >> straight
>> >> paint cabinet replacements were exactly that, see below.
>> >>
>> >> The black put out by Krylon worked very nicely. This was at the time
>> >> a
>> >> "semi flat" The needle that did not twist for vertical & horizontal
>> >> spray.
>> >> For straight paint 2 to 3 thin coats. For the spackled you needed a
>> >> couple of cans. Take a needle and poke into the spray jet just
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>> >> couple of
>> >> thin straight coats.
>> >> Good luck, Carl wd8nhk
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>> >> [Non-text portions of this message have been removed]
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12250. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 23:43:33 UTC
From: Paul Kraemer
Topic: 12210 Message: 12250

Pretty easy to blow almost $40 on round trip insured postage on a 4 series cabinet to the far corners of the 48 states. Then there is the packing material and time. Somebody has to pay the bill.
When the shipping costs almost as much as the paint job that seems significant.
Paul K0UYA
----- Original Message -----
From: "Mark Brueggemann" <qrq_cw@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 3:54 PM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

>
> --- On Thu, 2/28/13, Paul Kraemer> wrote:
>
>> I have done it and gaurantee the results but the round trip
>> shipping is going to be the big cost
>
> We're talking just the cabinet shell, right? I would think that could be
> fairly economically shipped. Maybe some models would require the chassis?
> Not sure, I'm a newbie to Drakes.
>
> I've successfully duplicated the "speckle" finish with the pin in the
> nozzle method, on a different brand of radio. I did the speckle with
> primer and then did a semigloss over that, turned out indistinguishable
> from factory. I cleaned and kept that nozzle just in case I ever need to
> get that texture again.
>
> Anyone know gray what matches the TR7 cabinet? I've read about the
> "sticky" paint and the vinyl covered cabinets. I've got a less than
> lovingly cared for TR7 that's next in the queue for a refurb. Mine
> appears to be paint, but isn't sticky.
>
> I'm redoing my 2B and 2BQ cabinets in Rustoleum satin black and as a test,
> before I sanded and primed I painted a section of it with one half of the
> original paint area masked. When I took the tape off and compared
> original and new side by side the color and sheen were as close a match as
> you could hope for coming out of a can.
>
> BTW, as a follow up to my earlier 2B dial white sheen question, I ended up
> going with flat white and it turned out perfect. As long as you don't
> have a 2nd 2B next to it to compare to, I suspect any nuance of difference
> in "whiteness" or sheen would ever be detected. After 50 years I suspect
> all of them are in various shades of white anyway. And the white wire I
> was after I had to settle for stuff the same OD but it's a shade too

> white. I reached the point of diminishing return to find wire with the
> right shade of off-white to blend in. I'll leave that to the next guy
> that rebuilds it.
>
>
> Mark K5LXP
> Albuquerque, NM
>
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> Yahoo! Groups Links
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12251. Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-02-28 23:53:39 UTC
From: mvgilger
Topic: 12210 Message: 12251

Paul,
Lets agree to disagree.

I've painted probably 500+ cabinets with this technique and when done properly, it's perfect match. The flat is just too dull and if you sit the the flat next to either an original or one painted by Hartzel, you will immediately be able to tell the different. Not so using the 51613 Satin with the #51601 Gloss black for spackling.

So each to his own, just my experience.

Now as far as the drilling out of the nozzle. That takes some practice and I always tell someone just starting out to start small and work your way up to the larger hole diameter. You also want the droplets to fall onto the cabinet, so it usually works best to put the cabinet on the ground and spray 2-3 feet above and over letting the droplets fall onto the surface. Takes practice for sure.

Have fun.

73's,
Mark, WB0IQK

--- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
>
> I respectfully disagree
>
> 51613 is too shiny, only matches cabinets that have been waxed a lot
> In my experience it is easier to start with the present day Krylon 15602
> flat (there are only three choices , flat, satin and gloss) and buff it up
> to the desired lustre. Use the flat for both base and spatter and the
> spatter will gloss up more being on the top
>
> If you want a closer match to the original 1613 try Dupli-Color 1608 Semi
> gloss lacquer but be careful what you use for primer or you will have
> wrinkle finish.
>
> And, the enlarge the hole in the spray tip technique, has not, in my
> experience with the newer style nozzles, been any walk in the park. You will
> end up with paint drool all over the can, your fingers and the floor. The
> only way I have gotten it to work is work over a large sheet of cardboard
> and get the spatter started satisfactory and continue moving over the
> project without altering your finger pressure. Difficult to do---cramps my
> index finger
>
> Just my experiences with black paint in a spray can. Only topic more
> subjective is what speaker / microphone is best
>

> Paul K0UYA
>
> ----- Original Message -----
> From: "mvgilger" <mgilger@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, February 28, 2013 4:37 PM
> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>
>
> > I've been trying to get Ron to post the updated document on his web page
> > (WB4HFN.COM), but I see it's still not there. The Krylon paints you need
> > are:
> >
> > Krylon #51317 Rubby Brown Primer
> > Krylon #51613 Satin black paint
> > Krylon #51601 Gloss black paint
> >
> > The drill size is still correct in the document, which is a #52 or .063
> > inch. Works great and get perfect match.
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> > The 51613 Satin black works better than the old #5613 Semi Flat.
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> > 73's,
> > Mark, WB0IQK
> > --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@> wrote:
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> >> As I have pointed out numerous times to members on this reflector and
> >> others
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> >> (1) The specified paint #1613 is no longer available and the Krylon
> >> recommended "same as" is NOT same as
> >> (2) Drilling out the present day EZ touch nozzles does NOT work like it
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> >> on the "old fashioned" nozzles
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> >> The internet is a wonderful place full of information. Too bad it does
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> >> self purge out of date information
> >>
> >> Paul K0UYA
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> >>
> >> ----- Original Message -----
> >> From: "mvgilger" <mgilger@>
> >> To: <DrakeRadio@yahoogroups.com>
> >> Sent: Thursday, February 28, 2013 9:10 AM
> >> Subject: [DrakeRadio] Re: Drake Cabinet Painting
> >>
> >>

> >> > Paul,
> >> > You can refinish these yourself. The procedure is written up on
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> >> > web site. The direct link is:
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> >> >> Presuming you are talking about black, whether spackled (bumpy) , or
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> >> >> I have no experience with the 7 series gray. The 7 line black
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> >> >> paint cabinet replacements were exactly that, see below.
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> >> >> The black put out by Krylon worked very nicely. This was at the time
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> >> >> "semi flat" The needle that did not twist for vertical & horizontal
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> >> >> For straight paint 2 to 3 thin coats. For the spackled you needed a
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> >> >> [Non-text portions of this message have been removed]
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12252. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 00:56:30 UTC
From: Paul Kraemer
Topic: 12210 Message: 12252

OK
I can agree to that but please remember I said to buff up the flat with a reducer to the point it matches the original piece, which, in my case is trying to make some rebuilt piece blend in with other 50 year olds that were clean otherwise un-touched.
When I shot my series of test panels using virtually everything on the rattle can market and placed them on top of all my various vintage Drakes I had a couple of outsider critical eye folks do a walk by. Not one picked 51613 as even close.
True test in my mind. Un-biased by my opinion.
Paul K0UYA

----- Original Message -----
From: "mvgilger" <mgilger@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 5:53 PM
Subject: [DrakeRadio] Re: Drake Cabinet Painting

> Paul,
> Lets agree to disagree.
>
> I've painted probably 500+ cabinets with this technique and when done
> properly, it's perfect match. The flat is just too dull and if you sit the
> the flat next to either an original or one painted by Hartzel, you will
> immediately be able to tell the different. Not so using the 51613 Satin
> with the #51601 Gloss black for spackling.
>
> So each to his own, just my experience.
>
> Now as far as the drilling out of the nozzle. That takes some practice and
> I always tell someone just starting out to start small and work your way
> up to the larger hole diameter. You also want the droplets to fall onto
> the cabinet, so it usually works best to put the cabinet on the ground and
> spray 2-3 feet above and over letting the droplets fall onto the surface.
> Takes practice for sure.
>
> Have fun.
>
> 73's,
> Mark, WB0IQK
>
> --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
>>
>> I respectfully disagree
>>

>> 51613 is too shiny, only matches cabinets that have been waxed a lot
>> In my experience it is easier to start with the present day Krylon 15602
>> flat (there are only three choices , flat, satin and gloss) and buff it
>> up
>> to the desired lustre. Use the flat for both base and spatter and the
>> spatter will gloss up more being on the top
>>
>> If you want a closer match to the original 1613 try Dupli-Color 1608 Semi
>> gloss lacquer but be careful what you use for primer or you will have
>> wrinkle finish.
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>> And, the enlarge the hole in the spray tip technique, has not, in my
>> experience with the newer style nozzles, been any walk in the park. You
>> will
>> end up with paint drool all over the can, your fingers and the floor. The
>> only way I have gotten it to work is work over a large sheet of cardboard
>> and get the spatter started satisfactory and continue moving over the
>> project without altering your finger pressure. Difficult to do---cramps
>> my
>> index finger
>>
>> Just my experiences with black paint in a spray can. Only topic more
>> subjective is what speaker / microphone is best
>>
>> Paul K0UYA
>>
>> ----- Original Message -----
>> From: "mvgilger" <mgilger@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Thursday, February 28, 2013 4:37 PM
>> Subject: [DrakeRadio] Re: Drake Cabinet Painting
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>> > I've been trying to get Ron to post the updated document on his web
>> > page
>> > (WB4HFN.COM), but I see it's still not there. The Krylon paints you
>> > need
>> > are:
>> >
>> > Krylon #51317 Rubby Brown Primer
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>> >> The internet is a wonderful place full of information. Too bad it does
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>> >> Paul K0UYA
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>> >> ----- Original Message -----
>> >> From: "mvgilger" <mgilger@>
>> >> To: <DrakeRadio@yahoogroups.com>
>> >> Sent: Thursday, February 28, 2013 9:10 AM
>> >> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>> >>
>> >>
>> >> > Paul,
>> >> > You can refinish these yourself. The procedure is written up on
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>> >> > web site. The direct link is:
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>> >> > http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
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>> >> >> I know this could shopped around locally, but would like to use
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>> >> >> Thanks! Paul, W9AC
>> >> >> Presuming you are talking about black, whether spackled (bumpy) ,

>> >> >> or
>> >> >> plain.
>> >> >> I have no experience with the 7 series gray. The 7 line black
>> >> >> straight
>> >> >> paint cabinet replacements were exactly that, see below.
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>> >> >> The black put out by Krylon worked very nicely. This was at the
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>> >> >> For straight paint 2 to 3 thin coats. For the spackled you needed
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12253. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 01:20:04 UTC
From: Ken Winterling
Topic: 12210 Message: 12253

Paul,

This is what I use on all sorts of spray cans to relieve the "cramps
my index finger" syndrome:

http://www.lowes.com/pd_284850-90-241526_0__?Ntt=Rust-Oleum+Comfort+Paint+Spray+Grip&UserSearch=Rust-Oleum+Comfort+Paint+Spray+Grip&productId=3078199&rpp=32

Ken
WA2LBI

On Thu, Feb 28, 2013 at 6:38 PM, Paul Kraemer <elespe@...> wrote:

> I respectfully disagree
>
> 51613 is too shiny, only matches cabinets that have been waxed a lot
> In my experience it is easier to start with the present day Krylon 15602
> flat (there are only three choices , flat, satin and gloss) and buff it up
> to the desired lustre. Use the flat for both base and spatter and the
> spatter will gloss up more being on the top
>
> If you want a closer match to the original 1613 try Dupli-Color 1608 Semi
> gloss lacquer but be careful what you use for primer or you will have
> wrinkle finish.
>
> And, the enlarge the hole in the spray tip technique, has not, in my
> experience with the newer style nozzles, been any walk in the park. You
> will
> end up with paint drool all over the can, your fingers and the floor. The
> only way I have gotten it to work is work over a large sheet of cardboard
> and get the spatter started satisfactory and continue moving over the
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> index finger
>
> Just my experiences with black paint in a spray can. Only topic more
> subjective is what speaker / microphone is best
>
> Paul K0UYA
>
> ----- Original Message -----
> From: "mvgilger" <mgilger@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, February 28, 2013 4:37 PM
> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>
>

> > I've been trying to get Ron to post the updated document on his web page
> > (WB4HFN.COM), but I see it's still not there. The Krylon paints you need
> > are:
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> > Krylon #51317 Rubby Brown Primer
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> > The drill size is still correct in the document, which is a #52 or .063
> > inch. Works great and get perfect match.
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> > The 51613 Satin black works better than the old #5613 Semi Flat.
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> > 73's,
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> > --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
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> >> Paul K0UYA
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> >>
> >>
> >> ----- Original Message -----
> >> From: "mvgilger" <mgilger@...>
> >> To: <DrakeRadio@yahoogroups.com>
> >> Sent: Thursday, February 28, 2013 9:10 AM
> >> Subject: [DrakeRadio] Re: Drake Cabinet Painting
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> >> > Paul,
> >> > You can refinish these yourself. The procedure is written up on
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[Non-text portions of this message have been removed]

12254. Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 01:23:26 UTC
From: slowcountry1
Topic: 12254 Message: 12254

After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?

Thanks,

Doug

12255. Re: [DrakeRadio] Re: Drake Cabinet Painting

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 01:36:24 UTC
From: Paul Kraemer
Topic: 12210 Message: 12255

Seen them, never tried them, but I will
Thanks
Paul K0UYA
----- Original Message -----
From: "Ken Winterling" <wa2lbi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, February 28, 2013 7:20 PM
Subject: Re: [DrakeRadio] Re: Drake Cabinet Painting

> Paul,
>
> This is what I use on all sorts of spray cans to relieve the "cramps
> my index finger" syndrome:
>
> http://www.lowes.com/pd_284850-90-241526_0__?Ntt=Rust-Oleum+Comfort+Paint+Spray+Grip&UserSearch=Rust-Oleum+Comfort+Paint+Spray+Grip&productId=3078199&rpp=32
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> Ken
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>> If you want a closer match to the original 1613 try Dupli-Color 1608 Semi
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>> index finger

>>
>> Just my experiences with black paint in a spray can. Only topic more
>> subjective is what speaker / microphone is best
>>
>> Paul K0UYA
>>
>> ----- Original Message -----
>> From: "mvgilger" <mgilger@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Thursday, February 28, 2013 4:37 PM
>> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>>
>>
>> > I've been trying to get Ron to post the updated document on his web
>> > page
>> > (WB4HFN.COM), but I see it's still not there. The Krylon paints you
>> > need
>> > are:
>> >
>> > Krylon #51317 Rubby Brown Primer
>> > Krylon #51613 Satin black paint
>> > Krylon #51601 Gloss black paint
>> >
>> > The drill size is still correct in the document, which is a #52 or .063
>> > inch. Works great and get perfect match.
>> >
>> > The 51613 Satin black works better than the old #5613 Semi Flat.
>> >
>> > 73's,
>> > Mark, WB0IQK
>> > --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
>> >>
>> >> As I have pointed out numerous times to members on this reflector and
>> >> others
>> >>
>> >> (1) The specified paint #1613 is no longer available and the Krylon
>> >> recommended "same as" is NOT same as
>> >> (2) Drilling out the present day EZ touch nozzles does NOT work like
>> >> it
>> >> did
>> >> on the "old fashioned" nozzles
>> >>
>> >> The internet is a wonderful place full of information. Too bad it does
>> >> not
>> >> self purge out of date information
>> >>
>> >> Paul K0UYA
>> >>
>> >>
>> >>

>> >> ----- Original Message -----
>> >> From: "mvgilger" <mgilger@...>
>> >> To: <DrakeRadio@yahoogroups.com>
>> >> Sent: Thursday, February 28, 2013 9:10 AM
>> >> Subject: [DrakeRadio] Re: Drake Cabinet Painting
>> >>
>> >>
>> >> > Paul,
>> >> > You can refinish these yourself. The procedure is written up on
>> >> > WB4HFN.COM
>> >> > web site. The direct link is:
>> >> >
>> >> > http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm
>> >> >
>> >> > Have fun.
>> >> > 73's,
>> >> > Mark, WB0IQK
>> >> >
>> >> > --- In DrakeRadio@yahoogroups.com, Chgypsy@ wrote:
>> >> >>
>> >> >>
>> >> >>
>> >> >> w9ac@ writes:
>> >> >>
>> >> >> I know this could shopped around locally, but would like to use
>> >> >> someone
>> >> >> with experience and who knows how to replicate the Drake cabinet
>> >> >> finish.
>> >> >> Thanks! Paul, W9AC
>> >> >> Presuming you are talking about black, whether spackled (bumpy) ,
>> >> >> or
>> >> >> plain.
>> >> >> I have no experience with the 7 series gray. The 7 line black
>> >> >> straight
>> >> >> paint cabinet replacements were exactly that, see below.
>> >> >>
>> >> >> The black put out by Krylon worked very nicely. This was at the
>> >> >> time
>> >> >> a
>> >> >> "semi flat" The needle that did not twist for vertical &
>> >> >> horizontal
>> >> >> spray.
>> >> >> For straight paint 2 to 3 thin coats. For the spackled you needed
>> >> >> a
>> >> >> couple of cans. Take a needle and poke into the spray jet just
>> >> >> enough
>> >> >> to put
>> >> >> out a not large spittle of paint...this takes some work and
>> >> >> practice
>> >> >> on

>> >> >> something (several times) The spackle is your first coat. Now do
>> >> >> a
>> >> >> couple of
>> >> >> thin straight coats.
>> >> >> Good luck, Carl wd8nhk
>> >> >>
>> >> >>
>> >> >>
>> >> >>
>> >> >>
>> >> >> [Non-text portions of this message have been removed]
>> >> >>
>> >> >
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>> >> > ------------------------------------
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>> >> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12256. Re: [DrakeRadio] Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 02:07:02 UTC
From: Garey Barrell
Topic: 12223 Message: 12256

Doug -

OK. The meter damping may be the problem, or the AVC Delay may be too short. If band noise comes
up between syllables of an SSB transmission or elements of a CW transmission, you may just be seeing
the result of a leakyC115. If you transmit a 'dot', the receiver should return gradually to normal
after a second or two. If the noise pops up immediately, then I'd try swapping C115.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Let's try it another way. Let's say youare tuning to a dial frequency of 1,000,000 Hz. If you
>> being tuning from the lower frequency, up, you will first hear a tone of about 2,700 Hz, and a dial
>> frequency of 997,300 Hz of the LOWER Sideband. If you continue in the same direction, you will hear
>> the tone decrease in frequency to about 300 Hz, at adial reading of 999,700 Hz. The signal will
>> then 'disappear', tuning through a dial setting of 1,000,000 Hz (zero beat) and then when you reach
>> 1,000,300 Hz you will again hear 300 Hz, this time in the UPPER Sideband. As you continue, the
>> audio tone will increase to about 2,700 Hz again, at a dial setting of 1,002,700Hz and then
>> disappear again.
>>
>> For CW, the Carrier Oscillator is shifted ~800 Hz to place it WITHIN the LSB passband so it can pass
>> throughwith minimal attenuationand become the transmitted signal. As a result, the dial frequency
>> of the transmitter will read about 800 Hz off of the TRUE transmitted frequency.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA

>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
>>>> letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear from ~300 - 2700
>>>> Hz on either side of the zero. The '300 -0 - 300' Hz range is outside the filter passband(s) and so
>>>> not heard.
>>>>
>>>> You used to be able to purchase lettering packets designed for lettering front panels of home brew
>>>> equipment. The idea is that the letters are a waxy substance adhered to a cover sheet. You placed
>>>> the letter or word whereyou wanted it on the panel, rubbed it with a burnishing tool, transferring
>>>> the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
>>>> protect it.
>>>>
>>>> A better idea available today is at
>>>>
>>>> <http://www.hyatts.com/art/dry-transfer-letters-1.5303>
>>>>
>>>> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
>>>> then generateyour own titles. (Tube numbers?)
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> Welcome to the group!
>>>>>>
>>>>>> I believe what you are seeing is the result of eight years of storage in less than ideal

>>>>>> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are
>>>>>> seeing. D5 is probably not strong enoughto break through! I like D100L liquid in the small bottle
>>>>>> with the needle applicator top. This allows you to apply strong deoxidizer right on the contacts
>>>>>> ONLY. SOME so-called 'contact cleaners' seem to be capable of swelling phenolic
>>>>>> wafers,causingcontact alignment problems, but I've not seen that with any DeoxIT products. Spraying
>>>>>> is still a bad idea, because any overspray serves to collect dust and even form carbonized leaky paths.
>>>>>>
>>>>>> The power switch may be repairable. They CAN be removed and contacts cleaned, etc. Afailure of the
>>>>>> camming mechanism may be fatal. Does the power switch 'click' when operated? If it does, it can
>>>>>> probably be repaired.
>>>>>>
>>>>>> Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any cleaning
>>>>>> method is going to do the same. I would just clean it the best I could, and then replace the
>>>>>> chassis lettering with dry transfer lettering.
>>>>>>
>>>>>> Your 'missing' zero-beat is because this is a SSB transceiver. The filter passband does NOT include
>>>>>> the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300 Hz. If you
>>>>>> crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
>>>>>> one way, you will hear either 300 - 2700 Hz beat, -OR- 2700 - 300 Hz, depending upon which way
>>>>>> you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
>>>>>> will hear the opposite of the above. Think of the letter "M" with the zero beat in the center
>>>>>> trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of the "M".
>>>>>>
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> slowcountry1 wrote:
>>>>>>> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to

start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
>>>>>>>
>>>>>>> Now that the history is out of the way, my real question is about cleaning the chassis. It has some dust and what I expect to be some nicotine from Grand Dad. I rubbed my index finger across the chassis to see how difficult it would be to remove the crud and to my dismay, while the crud came off, so did the tube lettering I was rubbing over. I used very little pressure. I am concerned if I use any type of cleaner that all of the chassis lettering will be removed. Does anyone have any suggestions for cleaning the chassis.
>>>>>>>
>>>>>>> As I stated, for the exception of the power switch, the unit works fine. I was going to clean all of the switches with Deoxit D5 spray but I saw somewhere that this may actually be bad on the insulating discs. Should I leave this thing alone and be happy that it works or are there better way to approach this?
>>>>>>>
>>>>>>> Thanks,
>>>>>>>
>>>>>>> Doug
>>>>>>>
>>>>>>>
>>>>> Gary,
>>>>>
>>>>> It is rather disheartening in that the chassis is not pitted, oxidized etc. It has been in my ham shack (upstairs unused bedroom) in a stable environment. It is not really dirty just a light film of dust; but yellowing that I assume is old cigarette smoke related. Very easy to wipe off however; the lettering comes off with the wiping of the finger. How do you re-label it as you described? Is there a website or something you have written?
>>>>>
>>>>> The power switch clicks as expected and has no sign of burning. I have 3 other T4 T4Cw-rit that I purchased as projects (never touched) their power switches all have obvious burns external and are open. So much for robbing peter to pay Paul.
>>>>>
>>>>> I posted my findings on the zero beat below;
>>>>>
>>>>> If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone can be found above 28.300. I can rotate the VFO through the tone and I do not find a null to zero on. If I change to USB, the tone is found below 28.300, when I rotate the VFO through the tone, again no null is found, the pitch varies as does the S meter. It sounds like it tries to make a tone on either side but it is almost non audible and would not allow for adjustment via the ear.
>>>>>
>>>>> If I switch to CW and transmit, I have adjusted the dial to align with 28.300 on my hand held MFJ freq counter. Again with the dial on 28.300 lsb tone is above and usb tone is below. Not two tones or a null in the tone. I have tuned very very slowly to see if I was just missing it but the null is not there.
>>>>>
>>>>>

>>>>>
>>>>>
>>>>> ------------------------------------
>>>>>
>>>>> Yahoo! Groups Links
>>>>>
>>>>>
>>>>>
>>>>>
>>> Gary,
>>>
>>> I apologize for my ignorance in advance. If I'm understanding your analogy correctly, if I'm in cal mode and I change to either side band I should not hear any tone on 28.300 but I should start to hear a tone above when in LSB and start to hear a tone below when in USB as I move the VFO?
>>>
>>> Is there value in setting the transceiver in CW-X and monitoring the transmission with a freq counter when finished?
>>>
>>> Thanks for your help, again I apologize for my ignorance.
>>>
>>> Doug
>>>
>>>
>>>
>>>
>>> ------------------------------------
>>>
>>> Yahoo! Groups Links
>>>
>>>
>>>
>>>
> Gary,
>
> I had done it in the reverse order as you described. I started out at 28.300 LSB, increased in frequency and shortly noticed the tone and returned back to 28.300. I then switched to USB and decreased frequency and shortly noticed the tone and again returned back to 28.200 and adjusted the dial so that no tone is present at 28.300 while in either LSB or USB modes. I have actually done it backwards then.
>
> The next topic I need to ask you about is the plate meter dampening. I just had a 45min QSO on 15M with a gentleman and noticed that the S meter needle was flopping all over the place. When I stop transmitting it rests at Zero however sometimes it will bang back to zero and get stuck below the zero mark and requires a slight tap to put it back on scale. I'm assuming that there is a tiny coil type spring acting as a dampening device? Is this common in older rigs? Is this repairable or is the meter done?
>
> Thanks for all of your assistance.
>

> Doug
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

12257. Re: [DrakeRadio] Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 02:24:06 UTC
From: Garey Barrell
Topic: 12254 Message: 12257

Doug -

I see I misread your earlier message regarding the meter damping.Yes, I have seen a few PLATE meters
lose their damping and get very bouncy. I suspect there is a spring counterbalance that breaks, but
I've never pursued it further. Unfortunately that action was typical of the very inexpensive meters
Drake used. A replacement meter from a donor unit shouldn't be too hard to find. In the 2-NT Drake
just put a large electrolytic cap across the meter ~300 uF @ 6V.

Your problem with the LOAD control is almost certainly the 1N270 diode, D9.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?
>
> Thanks,
>
> Doug
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
>

12258. Re: Drake TR-4CW cleaning and problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 02:25:13 UTC
From: slowcountry1
Topic: 12223 Message: 12258

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> OK. The meter damping may be the problem, or the AVC Delay may be too short. If band noise comes
> up between syllables of an SSB transmission or elements of a CW transmission, you may just be seeing
> the result of a leakyC115. If you transmit a 'dot', the receiver should return gradually to normal
> after a second or two. If the noise pops up immediately, then I'd try swapping C115.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Let's try it another way. Let's say youare tuning to a dial frequency of 1,000,000 Hz. If you
> >> being tuning from the lower frequency, up, you will first hear a tone of about 2,700 Hz, and a dial
> >> frequency of 997,300 Hz of the LOWER Sideband. If you continue in the same direction, you will hear
> >> the tone decrease in frequency to about 300 Hz, at adial reading of 999,700 Hz. The signal will
> >> then 'disappear', tuning through a dial setting of 1,000,000 Hz (zero beat) and then when you reach
> >> 1,000,300 Hz you will again hear 300 Hz, this time in the UPPER Sideband. As you continue, the
> >> audio tone will increase to about 2,700 Hz again, at a dial setting of 1,002,700Hz and then
> >> disappear again.
> >>
> >> For CW, the Carrier Oscillator is shifted ~800 Hz to place it WITHIN the LSB passband so it can pass
> >> throughwith minimal attenuationand become the transmitted signal. As a result, the dial frequency
> >> of the transmitter will read about 800 Hz off of the TRUE transmitted frequency.

> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> Refer to my "M" description below. Your 'zero beat' is at the bottom of the center trough of the
> >>>> letter. The Upper and Lower sidebands are the two peaks. Each allows you to hear from ~300 - 2700
> >>>> Hz on either side of the zero. The '300 -0 - 300' Hz range is outside the filter passband(s) and so
> >>>> not heard.
> >>>>
> >>>> You used to be able to purchase lettering packets designed for lettering front panels of home brew
> >>>> equipment. The idea is that the letters are a waxy substance adhered to a cover sheet. You placed
> >>>> the letter or word whereyou wanted it on the panel, rubbed it with a burnishing tool, transferring
> >>>> the letter or word to the panel. The finished panel would be sprayed with a clear fixative spray to
> >>>> protect it.
> >>>>
> >>>> A better idea available today is at
> >>>>
> >>>> <http://www.hyatts.com/art/dry-transfer-letters-1.5303>
> >>>>
> >>>> this is a special paper allowing you to print your own 'words', symbols, etc. on a laser printer and
> >>>> then generateyour own titles. (Tube numbers?)
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
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> >>>>>>
> >>>>>> Welcome to the group!

> >>>>>>
> >>>>>> I believe what you are seeing is the result of eight years of storage in less than ideal
> >>>>>> conditions. Dirty (corroded, oxidizes, etc.,) switch contacts would present as what you are
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> >>>>>> The power switch may be repairable. They CAN be removed and contacts cleaned, etc. Afailure of the
> >>>>>> camming mechanism may be fatal. Does the power switch 'click' when operated? If it does, it can
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> >>>>>> Cleaning the chassis is tough. If the lettering is wiping off with your finger, most any cleaning
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> >>>>>> the Carrier Oscillator, so you hear the beat note from about 2.7 kHz down to about 300 Hz. If you
> >>>>>> crank up the gain you might be able to hear below 300. However, if you tune across the Calibrator
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> >>>>>> you're tuning. If you switch tothe 'other' sideband, and tune through in the same direction, you
> >>>>>> will hear the opposite of the above. Think of the letter "M" with the zero beat in the center
> >>>>>> trough. Depending upon the sideband selected, you will hear ONLY one of the 'peaks' of the "M".
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> >>>>>> slowcountry1 wrote:
> >>>>>>> About 20 years ago I received a Drake TR-4CW from my step grandfather after his passing. I received it in full working condition; about 4 years afterward I decided to start using it. I rebuilt the power supply and everything worked quite well. After an absence, the unit has set on a shelf for the last 8 years. I pulled it out and found the power switch open. After unsuccessful cleaning attempts with Deoxit D5 spray, I decided to short the switch and the unit tunes up and receives as expected. The band lights work sometimes and not others, suspect dirty connections. Any insight here?
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> >>>>>>> Thanks,
> >>>>>>>
> >>>>>>> Doug
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> >>>>>>>
> >>>>> Gary,
> >>>>>
> >>>>> It is rather disheartening in that the chassis is not pitted, oxidized etc. It has been in my ham shack (upstairs unused bedroom) in a stable environment. It is not really dirty just a light film of dust; but yellowing that I assume is old cigarette smoke related. Very easy to wipe off however; the lettering comes off with the wiping of the finger. How do you re-label it as you described? Is there a website or something you have written?
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> >>>>> I posted my findings on the zero beat below;
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> >>>>> If I set the VFO for 28.300 LSB and turn the switch to Cal, the tone can be found above 28.300. I can rotate the VFO through the tone and I do not find a null to zero on. If I change to USB, the tone is found below 28.300, when I rotate the VFO through the tone, again no null is found, the pitch varies as does the S meter. It sounds like it tries to make a tone on either side but it is almost non audible and would not allow for adjustment via the ear.
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below. Not two tones or a null in the tone. I have tuned very very slowly to see if I was just missing it but the null is not there.
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> >>>>>
> >>>>> Yahoo! Groups Links
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>> Gary,
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> >>>
> >>> Is there value in setting the transceiver in CW-X and monitoring the transmission with a freq counter when finished?
> >>>
> >>> Thanks for your help, again I apologize for my ignorance.
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> >>> Yahoo! Groups Links
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> >
> > The next topic I need to ask you about is the plate meter dampening. I just had a 45min QSO on 15M with a gentleman and noticed that the S meter needle was flopping all over the place. When I stop transmitting it rests at Zero however sometimes it will bang back to zero and get stuck below the zero mark and requires a slight tap to put it back on scale. I'm assuming that there is a tiny coil type spring acting as a dampening device? Is this common in older rigs? Is this repairable or is the meter done?

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> >
> > Doug
> >
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> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
>
Gary,

Again, please forgive me for my ignorance. I do not know what the AVC delay is.

I can stop talking and keep the mic keyed and no band noise is heard, I read a small amount of plate voltage, similar to the bias reading I believe. The meter just became extremely bouncy, in other words the needle moves very fast and then bounces back quickly. It almost could make you dizzy watching it swing upward and then downward on voice peaks and valleys; it responds very quickly. I do not know what they used for dampening but its like there was a coil spring attached to the needle for dampening and now its gone.

This obviously does not effect the operation of the radio but if I'm going to the trouble of fixing it up I want to try to fix this up as well.

Thanks for all of your help, it is greatly appreciated!!!

12259. Re: Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 02:31:12 UTC
From: slowcountry1
Topic: 12254 Message: 12259

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I see I misread your earlier message regarding the meter damping.Yes, I have seen a few PLATE meters
> lose their damping and get very bouncy. I suspect there is a spring counterbalance that breaks, but
> I've never pursued it further. Unfortunately that action was typical of the very inexpensive meters
> Drake used. A replacement meter from a donor unit shouldn't be too hard to find. In the 2-NT Drake
> just put a large electrolytic cap across the meter ~300 uF @ 6V.
>
> Your problem with the LOAD control is almost certainly the 1N270 diode, D9.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?
> >
> > Thanks,
> >
> > Doug
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >

> >
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> >
>

The 2-NT Drake used a different style meter didn't it? I have a TR-4 and 4CW wRIT, I can see it either of those meters are any good i suppose.

12260. Re: Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 12:59:54 UTC
From: fred
Topic: 12254 Message: 12260

Doug
I had the same thing happen on a swan. in my case there was a 3/8 dia. disk stuck to the magnet and preventing the movement from reading higher that 1/4 of the scale . opened the metre and removed the disk and it worked normally except that is was , like you say very bouncy . opened it again and found where the disk was located and glued it back with a bit of service cement . very tight spot to get to , if like mine (edgewise metre) you will need a non magnetic tweezer to get it back in place . after that it worked properly again .

andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I see I misread your earlier message regarding the meter damping.Yes, I have seen a few PLATE meters
> lose their damping and get very bouncy. I suspect there is a spring counterbalance that breaks, but
> I've never pursued it further. Unfortunately that action was typical of the very inexpensive meters
> Drake used. A replacement meter from a donor unit shouldn't be too hard to find. In the 2-NT Drake
> just put a large electrolytic cap across the meter ~300 uF @ 6V.
>
> Your problem with the LOAD control is almost certainly the 1N270 diode, D9.
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?

> >
> > Thanks,
> >
> > Doug
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
> >
>

12261. Re: Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 13:04:23 UTC
From: slowcountry1
Topic: 12254 Message: 12261

--- In DrakeRadio@yahoogroups.com, "fred" <radiomanl@...> wrote:
>
> Doug
> I had the same thing happen on a swan. in my case there was a 3/8 dia. disk stuck to the magnet and preventing the movement from reading higher that 1/4 of the scale . opened the metre and removed the disk and it worked normally except that is was , like you say very bouncy . opened it again and found where the disk was located and glued it back with a bit of service cement . very tight spot to get to , if like mine (edgewise metre) you will need a non magnetic tweezer to get it back in place . after that it worked properly again .
>
> andrew
> kd5pnt
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doug -

> >
> > I see I misread your earlier message regarding the meter damping.Yes, I have seen a few PLATE meters
> > lose their damping and get very bouncy. I suspect there is a spring counterbalance that breaks, but
> > I've never pursued it further. Unfortunately that action was typical of the very inexpensive meters
> > Drake used. A replacement meter from a donor unit shouldn't be too hard to find. In the 2-NT Drake
> > just put a large electrolytic cap across the meter ~300 uF @ 6V.
> >
> > Your problem with the LOAD control is almost certainly the 1N270 diode, D9.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > slowcountry1 wrote:
> > > After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load

control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?
> > >
> > > Thanks,
> > >
> > > Doug
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
> > >
> > >
> > >
> > >
> >
>

Fred,

Thank you for the info. I'm going to attempt to remove the meter this weekend and see if there is a way to disassemble and try a repair.

12262. Re: [DrakeRadio] Re: Plate meter and relative output issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 14:59:25 UTC
From: Garey Barrell
Topic: 12254 Message: 12262

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> I see I misread your earlier message regarding the meter damping.Yes, I have seen a few PLATE meters
>> lose their damping and get very bouncy. I suspect there is a spring counterbalance that breaks, but
>> I've never pursued it further. Unfortunately that action was typical of the very inexpensive meters
>> Drake used. A replacement meter from a donor unit shouldn't be too hard to find. In the 2-NT Drake
>> just put a large electrolytic cap across the meter ~300 uF @ 6V.
>>
>> Your problem with the LOAD control is almost certainly the 1N270 diode, D9.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> slowcountry1 wrote:
>>> After a long QSO today on 15 meters, my resurrected TR-4Cw developed an issue with the plate meter and the relative output when the load control is depressed. The plate meter has become very "bouncy" during tune up or normal operation. It acts like whatever was used for dampening is gone. It bounces hard enough that when you stop talking and un-key sometimes the needle gets stuck below 0 and I have to tap on the meter to get it to unstick. The meter never pegs out and displays correct values, it just moves very rapidly without dampening. At or about the same time, I noticed that when I depress the load control to activate the relative output meter, this does not produce a deflection on the plate meter. I checked the switch with an Ohm meter and it appears to open and close properly. Any ideas on these issues?
>>>
>>> Thanks,
>>>
>>> Doug
>>>
>>>
> The 2-NT Drake used a different style meter didn't it? I have a TR-4 and 4CW wRIT, I can see it either of those meters are any good i suppose.
>

Doug -

ALL the TR-4 meters are the same. The TR-3 meter IS different. But ANY TR-4 meter from a donor

unit will work.

Garey

12263. SL-4000 Filter (was:TR-7 Filter Swap)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 17:59:10 UTC
From: qrpcwop
Topic: 9253 Message: 12263

Found an SL-1800 bright & early this morning on our favorite auction site - at much better price than that of a new INRAD.

So - is anyone interested in purchasing an SL-4000 AM filter outright?
$50 + shipping.

Al

--- In DrakeRadio@yahoogroups.com, "qrpcwop" <k2zn@...> wrote:
>
> It never hurts to ask...
>
> Anyone interested in swapping an SL-1800 for my SL-4000?
>
> 73 - Al, K2ZN
>

12264. Optional Crystals for the Drake 2-A receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 20:37:58 UTC
From: trapp7318
Topic: 12264 Message: 12264

Hi Everyone:
I recently purchased a Drake 2-A receiver and am interested in purchasing additional crystals, since I am no too familiar with this receiver what bands can this radio additionally be used on?
I am interested in using it on 160, but don't really know if it can be used on that band.
Please let me know.
Thank you all
Wayne

12265. Re: [DrakeRadio] Optional Crystals for the Drake 2-A receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 20:53:00 UTC
From: Garey Barrell
Topic: 12264 Message: 12265

Wayne -

The 2-A/B can NOT be used on 160M without modification. Any of the R-4 Series receivers CAN be used
on 160 with the addition of a 12.6 MHz crystal.

Attached is a modification from my Service Supplement CD for the 2-B receiver allow 160M operation.
If you plan to invest in this receiver, you might want to take a look at my CD at <www.k4oah.com>.
It will save you lots of time and trouble.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

trapp7318 wrote:
> Hi Everyone:
> I recently purchased a Drake 2-A receiver and am interested in purchasing additional crystals, since I am no too familiar with this receiver what bands can this radio additionally be used on?
> I am interested in using it on 160, but don't really know if it can be used on that band.
> Please let me know.
> Thank you all
> Wayne
>

[Non-text portions of this message have been removed]

12266. Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 21:14:44 UTC
From: Mark Pilant
Topic: 12266 Message: 12266

I'm getting close :-) :-)

I got the replacement MIC jacks in the other day and put one in last night. It all went smoothly... except... I found another modification. (You knew that was coming :-)

It seems somewhere along the way R94 (from the MIC to the grid of V18 got replaced with two 300 ohm resistors in parallel. I changed this back to the 47k resistor at the same time I replaced the jack.

So about all I have to do is complete the alignment and then give it a try on the air.

So close :-)

Thank you everyone for your help along this journey.

73

- Mark N1VQW

12267. Re: [DrakeRadio] Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 21:31:02 UTC
From: Garey Barrell
Topic: 12266 Message: 12267

Mark -

Since most of what we did was done 'off frequency', I'd appreciate it if you would write up a brief
description of what problems you found, and how you found and repaired them. Post it to the list,
get it in the archives!!

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> I'm getting close :-) :-)
>
> I got the replacement MIC jacks in the other day and put one in
> last night. It all went smoothly... except... I found another
> modification. (You knew that was coming :-)
>
> It seems somewhere along the way R94 (from the MIC to the grid
> of V18 got replaced with two 300 ohm resistors in parallel. I
> changed this back to the 47k resistor at the same time I replaced
> the jack.
>
> So about all I have to do is complete the alignment and then give
> it a try on the air.
>
> So close :-)
>
> Thank you everyone for your help along this journey.
>
> 73
>
> - Mark N1VQW
>
>

12268. Re: [DrakeRadio] Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 21:43:17 UTC
From: Mark Pilant
Topic: 12266 Message: 12268

Hi Garey.

> I'd appreciate it if you would write up...

That has been my plan. I just need to finish :-) Most everything
is in my various postings, but I wanted to collect it all together
to make it easier to follow.

73

- Mark N1VQW

12269. Re: [DrakeRadio] Re: Early AC-3 Power Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-01 21:43:19 UTC
From: Steve Wedge
Topic: 12181 Message: 12269

Kihwal, was this the tr-3 that I sold you? Looks a heckuva lot better :)

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Feb 28, 2013, at 4:51 PM, Kihwal Lee <kihwal@...> wrote:

> It looks better on pictures. I applied copper-colored spray paint after cleaning
> the surface. The labels were printed on a sheet of transparent film and clear
> double sided tape was used to attach them. This is NOT restoration. The painted
> surface is not conductive anymore and the labels can come off, although I made
> sure it doesn't melt or get loose with the typical surface temperature of TR-3
> chassis top. It was only done to the worst of three TR-3's I have.
>
> Kihwal, K9SUL
>
> _____
> From: Fraser fraser_w3utd@....uk>
> To: DrakeRadio@yahoogroups.com
> Sent: Thu, February 28, 2013 12:56:44 PM
> Subject: [DrakeRadio] Re: Early AC-3 Power Supply
>
> That's an amazing transformation of the copper chassis. How did you do that?
>
> --- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" wrote:
> >
> > Kihwal - Terrific restoration! How did you re-do the copper chassis? What did
> >you use for the letters?
> >
> > 73,
> >
> > Terry K7WLD
> >
> > Wenatchee, WA
> >
> >
> >
> > From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf
> >Of Kihwal Lee
> > Sent: Monday, February 25, 2013 6:01 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] Early AC-3 Power Supply
> >
> >
> >

> >
> >
> > Fraser,
> >
> > I just uploaded it to the group site.
> >
> > http://groups.yahoo.com/group/DrakeRadio/photos/album/652156698/pic/list
> >
> > 73
> > Kihwal, K9SUL
> >
> > _____
> > From: Fraser fraser_w3utd@... >
> > To: DrakeRadio@yahoogroups.com
> > Sent: Sun, February 24, 2013 9:47:39 PM
> > Subject: [DrakeRadio] Early AC-3 Power Supply
> >
> > Does anyone have a schematic of the early AC-3 power supply? The one without
> >can
> >
> > caps on the top, but with all the caps underneath the chassis.
> >
> > I have one coming, and I'd just like to get replacement caps beforehand.
> >
> > Thanks,
> >
> > Fraser, W3UTD
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12270. Re: [DrakeRadio] Optional Crystals for the Drake 2-A receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 00:03:54 UTC
From: Ian Wilson
Topic: 12264 Message: 12270

I wonder (not being able to see Garey's modification) whether
it would be easier to make a crystal-controlled converter from
160m to the "straight through" 3.5-4MHz band of the 2A/B?

73, ian K3IMW

On Fri, Mar 1, 2013 at 12:53 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> Wayne -
>
> The 2-A/B can NOT be used on 160M without modification. Any of the R-4
> Series receivers CAN be used
> on 160 with the addition of a 12.6 MHz crystal.
>
> Attached is a modification from my Service Supplement CD for the 2-B
> receiver allow 160M operation.
> If you plan to invest in this receiver, you might want to take a look at
> my CD at .
> It will save you lots of time and trouble.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
>
> trapp7318 wrote:
> > Hi Everyone:
> > I recently purchased a Drake 2-A receiver and am interested in
> purchasing additional crystals, since I am no too familiar with this
> receiver what bands can this radio additionally be used on?
> > I am interested in using it on 160, but don't really know if it can be
> used on that band.
> > Please let me know.
> > Thank you all
> > Wayne
> >
>
> [Non-text portions of this message have been removed]
>
>

>

[Non-text portions of this message have been removed]

12271. Re: [DrakeRadio] Optional Crystals for the Drake 2-A receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 02:45:27 UTC
From: Garey Barrell
Topic: 12264 Message: 12271

Ian -

That would be one way, the 2-LF moves the bottom 2 MHz of the spectrum up to the 10M band with a
simple mixer and tuned input network.

The mod for 160 is pretty simple, mainly adding capacitance to the BAND A trimmers and a 5.5 MHz
crystal to cover 1.8 - 2.0 MHz.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ian Wilson wrote:
> I wonder (not being able to see Garey's modification) whether
> it would be easier to make a crystal-controlled converter from
> 160m to the "straight through" 3.5-4MHz band of the 2A/B?
>
> 73, ian K3IMW
>
> On Fri, Mar 1, 2013 at 12:53 PM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Wayne -
>>
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>> Series receivers CAN be used
>> on 160 with the addition of a 12.6 MHz crystal.
>>
>> Attached is a modification from my Service Supplement CD for the 2-B
>> receiver allow 160M operation.
>> If you plan to invest in this receiver, you might want to take a look at
>> my CD at .
>> It will save you lots of time and trouble.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

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>>
>>
>>
>> trapp7318 wrote:
>>> Hi Everyone:
>>> I recently purchased a Drake 2-A receiver and am interested in
>> purchasing additional crystals, since I am no too familiar with this
>> receiver what bands can this radio additionally be used on?
>>> I am interested in using it on 160, but don't really know if it can be
>> used on that band.
>>> Please let me know.
>>> Thank you all
>>> Wayne
>>>

[Non-text portions of this message have been removed]

12272. TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 03:19:12 UTC
From: slowcountry1
Topic: 12272 Message: 12272

Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27 ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.

I turned the unit on and it powered up as expected. I checked the bias voltage; it was just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.

Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?

Thanks,

Doug

12273. Re: [DrakeRadio] TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 03:56:16 UTC
From: Garey Barrell
Topic: 12272 Message: 12273

Doug -

Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
now working. I believe that is what we were working on! I have several of these little 'projects'
going on at a time and it helps to keep them straight if you leave previous message content in place.

Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
wiring and operation in TUNE and SSB is essentially the same, so if TUNE works the only thing left
is V18 or associated wiring/switching.

The 27 ohm resistor is R192 and is a 'fuse' for the +250VDC line. Do NOT replace it with a larger
power resistor, it should be a 27 ohm, carbon composition resistor. They DO fail after years,
because they ARE actually overloaded. Usually a darkened one indicates electrolytic capacitor
leakage in C145. One that is split oftenindicates a short on the +250 VDC line.

If you are seeing 200W OUTPUT on 10M, you need to do the neutralization procedure, check your dummy
load, and wattmeter for accuracy. Anything over ~150W on 10M is highly suspect.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27 ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
>
> I turned the unit on and it powered up as expected. I checked the bias voltage; it was

just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.
>
> Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?
>
> Thanks,
>
> Doug
>
>

12274. Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 04:13:44 UTC
From: slowcountry1
Topic: 12272 Message: 12274

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
> now working. I believe that is what we were working on! I have several of these little 'projects'
> going on at a time and it helps to keep them straight if you leave previous message content in place.
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> Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
> problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
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>
> The 27 ohm resistor is R192 and is a 'fuse' for the +250VDC line. Do NOT replace it with a larger
> power resistor, it should be a 27 ohm, carbon composition resistor. They DO fail after years,
> because they ARE actually overloaded. Usually a darkened one indicates electrolytic capacitor
> leakage in C145. One that is split oftenindicates a short on the +250 VDC line.
>
> If you are seeing 200W OUTPUT on 10M, you need to do the neutralization procedure, check your dummy
> load, and wattmeter for accuracy. Anything over ~150W on 10M is highly suspect.
>
> --
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27

ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
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> > I turned the unit on and it powered up as expected. I checked the bias voltage; it was just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.
> >
> > Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?
> >
> > Thanks,
> >
> > Doug
> >
> >
>
Gary,

The transmit audio was perfectly fine prior to my work. You were guiding me through a plate meter bouncing problem and no relative output on the plate meter when the load control was pressed. The power switch was open and I had shorted it and used a surge suppressor switch to turn it on and off. The rig transmitted just fine until I did the work this evening. I have tried multiple microphones that I know to be good. I have unseated. And reseated all the tubes except the finals.

I'm afraid I did something wrong.

12275. Drake 2-A Receiver crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 04:58:53 UTC
From: trapp7318
Topic: 12275 Message: 12275

Hi Everyone again:
Just want to know what crystal frequencies should I use to receive shortwave broadcasts on my drake 2-A, without doing any special modification to the rig?
What are the crystal frequencies that the 2-A will accept without doing any modification?
Thank you
Wayne

12276. Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 05:07:55 UTC
From: slowcountry1
Topic: 12272 Message: 12276

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
> now working. I believe that is what we were working on! I have several of these little 'projects'
> going on at a time and it helps to keep them straight if you leave previous message content in place.
>
> Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
> problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
> wiring and operation in TUNE and SSB is essentially the same, so if TUNE works the only thing left
> is V18 or associated wiring/switching.
>
> The 27 ohm resistor is R192 and is a 'fuse' for the +250VDC line. Do NOT replace it with a larger
> power resistor, it should be a 27 ohm, carbon composition resistor. They DO fail after years,
> because they ARE actually overloaded. Usually a darkened one indicates electrolytic capacitor
> leakage in C145. One that is split oftenindicates a short on the +250 VDC line.
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> --
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> slowcountry1 wrote:
> > Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27

ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
> >
> > I turned the unit on and it powered up as expected. I checked the bias voltage; it was just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.
> >
> > Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?
> >
> > Thanks,
> >
> > Doug
> >
> >
>
I replaced V18 will a pull, so I truly don't know how great it is. I got the same results. Any ideas where else to look?

12277. Re: [DrakeRadio] Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 15:05:48 UTC
From: Don Cunningham
Topic: 12272 Message: 12277

Check the microphone jack you installed against the schematic. That is VERY easy to mess up with any of the Drakes, and have done it myself several times over the years. I probably have at least a 50/50 chance of getting it right first time, hi. Use the schematic as reference though, the one that goes with your serial number range. Your "other one" may be wrong too!!! Been there, done that.

Is there a way your email can be made to post to the top of the message, not the bottom?? It sure makes it hard to find what you said last when it is somewhere in the bottom.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12278. Re: [DrakeRadio] Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 15:24:28 UTC
From: john
Topic: 12272 Message: 12278

If I have a 50/50 chance, 90% of the time I'll be wrong !

John K5MO

At 10:05 AM 3/2/2013, Don Cunningham wrote:
>Check the microphone jack you installed against the schematic. That is
>VERY easy to mess up with any of the Drakes, and have done it myself
>several times over the years. I probably have at least a 50/50 chance of
>getting it right first time, hi. Use the schematic as reference though,
>the one that goes with your serial number range. Your "other one" may be
>wrong too!!! Been there, done that.
>
>Is there a way your email can be made to post to the top of the message,
>not the bottom?? It sure makes it hard to find what you said last when it
>is somewhere in the bottom.
>73,
>Don, WB5HAK
>
>[Non-text portions of this message have been removed]
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>Yahoo! Groups Links
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12279. Re: [DrakeRadio] Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 15:51:56 UTC
From: Garey Barrell
Topic: 12272 Message: 12279

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
>> now working. I believe that is what we were working on! I have several of these little 'projects'
>> going on at a time and it helps to keep them straight if you leave previous message content in place.
>>
>> Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
>> problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
>> wiring and operation in TUNE and SSB is essentially the same, so if TUNE works the only thing left
>> is V18 or associated wiring/switching.
>>
>> The 27 ohm resistor is R192 and is a 'fuse' for the +250VDC line. Do NOT replace it with a larger
>> power resistor, it should be a 27 ohm, carbon composition resistor. They DO fail after years,
>> because they ARE actually overloaded. Usually a darkened one indicates electrolytic capacitor
>> leakage in C145. One that is split oftenindicates a short on the +250 VDC line.
>>
>> If you are seeing 200W OUTPUT on 10M, you need to do the neutralization procedure, check your dummy
>> load, and wattmeter for accuracy. Anything over ~150W on 10M is highly suspect.
>>
>> --
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>
>> slowcountry1 wrote:
>>> Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a

dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27 ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
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>>> I turned the unit on and it powered up as expected. I checked the bias voltage; it was just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.
>>>
>>> Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?
>>>
>>> Thanks,
>>>
>>> Doug
>>>
>>>
> Gary,
>
> The transmit audio was perfectly fine prior to my work. You were guiding me through a plate meter bouncing problem and no relative output on the plate meter when the load control was pressed. The power switch was open and I had shorted it and used a surge suppressor switch to turn it on and off. The rig transmitted just fine until I did the work this evening. I have tried multiple microphones that I know to be good. I have unseated. And reseated all the tubes except the finals.
>
> I'm afraid I did something wrong.
>

Doug -

OK. Hoped it would be something easy. Really it can't be too bad, because the entire transmitter
is operational in TUNE, with the exception of the Mic Amp and switching. I don't 'think' any of the
audio wiring is around the relay, so ....

First question. Does the VOX operate when you talk into the microphone? VOX GAIN advanced 1/2
rotation or more? ANTI-VOX full CCW.?

XMIT GAIN advanced?

The MIC audio comes out of the MIC AMP on Pin 8 of V18, through a 0.47 uF film cap to shielded
cable, to the front side of the front wafer of the MODE switch. Then a shielded cable from the
switch to R76 on the bottom of T-14.

12280. Re: [DrakeRadio] Drake 2-A Receiver crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 16:09:21 UTC
From: Garey Barrell
Topic: 12275 Message: 12280

Wayne -

Basically the crystal is + 4 MHz from the lowest desired frequency, or -4 MHz from the highest
desired frequency.....

From this you can see that there are two ranges covered by a crystal, depending upon the setting of
the Preselector. Just for example, say you wanted to receive 15 MHz for WWV. To put WWV at the
bottom of the receiver's tuning range, a crystal of 11 MHz would work. Using that same 11 MHz
crystal, you could also cover the 7.0 to 7.6 MHz range, and in fact that is the 40M crystal that
comes with the receiver.

There are six pages of information regarding selection of crystals and the rules involved. If you
don't have a manual, I would strongly suggest that you get one. There is a high resolution scan of
an original manual, along with much more service information, on my Service Supplement CD for the
2-B. Information at <www.k4oah.com>.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

trapp7318 wrote:
> Hi Everyone again:
> Just want to know what crystal frequencies should I use to receive shortwave broadcasts on my drake 2-A, without doing any special modification to the rig?
> What are the crystal frequencies that the 2-A will accept without doing any modification?
> Thank you
> Wayne
>
>
>
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> Yahoo! Groups Links
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12281. Re: [DrakeRadio] Drake 2-A Receiver crystals

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 16:57:39 UTC
From: Wayne Skiba
Topic: 12275 Message: 12281

Hi Garey:
Thank you for this information, I am getting a manual with the 2A, but I wanted to get a head start on determining what frequencies I wanted the receiver to cover , and to see what was out there and what type of crystals I would have to get.
Best 73's
Wayne

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, March 2, 2013 10:09 AM
Subject: Re: [DrakeRadio] Drake 2-A Receiver crystals

Wayne -

Basically the crystal is + 4 MHz from the lowest desired frequency, or -4 MHz from the highest
desired frequency.....

From this you can see that there are two ranges covered by a crystal, depending upon the setting of
the Preselector. Just for example, say you wanted to receive 15 MHz for WWV. To put WWV at the
bottom of the receiver's tuning range, a crystal of 11 MHz would work. Using that same 11 MHz
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73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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trapp7318 wrote:
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> Thank you
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>
>
>
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> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

12282. t4x and t4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 18:29:58 UTC
From: n8mfn
Topic: 12282 Message: 12282

Just had a guy give me an old Drake R4 and T4x I tried the R4 and wont turn on very disapointed but I think I may find the problem and I know the knolage on this reflector will get them up and running so thanks in advance.
Rick N8MFN

12283. Re: R4B intermittent passband

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 20:18:38 UTC
From: jnminni@att.net
Topic: 12192 Message: 12283

I finally got around to removing the rear cover on the passband tuner to see what was inside. I pulled out the cam and applied a little lithium grease just for good measure, but I think my intermittency problem was nothing more than a simple cleaning and adjustment of the round pivot on the rear cover. The set seems to be working fine again.
-John/AC8KU

--- In DrakeRadio@yahoogroups.com, "jnminni@..." <jnminni@...> wrote:
>
> My R4B has developed a new "opportunity" for me to work on. The passband tuning has developed an intermittency similar to how a dirty pot would sound when you wriggle the knob. Now I think that inside that passband tuning box there is just a slug that moves in and out of an inductor. So I don't know how to begin with this. Possibly a broken wire or loose connection inside the box would cause this. I suppose that it is also possible that dirty contacts in the bandwidth switch (that shares a concentric shaft with the passband tuning) could be the problem, but really it seems more like it is the passband tuning itself. How would I begin to work on this? How difficult is it to get that passband tuning enclosure apart and, more importantly, how difficult to get it back together.
> John/AC8KU
>

12284. FOR SALE - DRAKE 7077 DESK MICROPHONE for TR-7 Transceiver.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-02 21:11:16 UTC
From: Robert Ross
Topic: 12284 Message: 12284

Hi Guys:

I have FOR SALE the following DRAKE MICROPHONE.....

Model 7077 DESK MICROPHONE for DRAKE TR7 Transceiver
Black Plastic Microphone with DRAKE LOGO that matches the TR-7
Push to Talk and Lock down down Buttons
Original Black Coiled Cord and 4 Pin Female Connector ready to hook up to a Drake TR-7

CONDITION is VG+ and Clean from a NON-Smoking Home
A Few Minor Scuffs on Base, but NO Damage or Dents or Cracks etc. Original Black Coiled Cord is Excellent with no Rubber Rot
Original Microphone Jack in Excellent Condition and Front Grill is Excellent.
Microphone in Good Working Order...ready to use with a TR-7

PHOTOS are Available for anyone interested by EMAIL

PRICE is.....$100.00 USA DOLLARS + $20.00 POSTAGE to NORTH AMERICA ONLY
****
**

PAYMENT is by USPS INTERNATIONAL MONEY ORDER (The Pink Coloured One or CANADA POST MONEY ORDER Only
****
****

SORRY....NO PAYPAL on this
****

To receive Photos by EMAIL or to purchase this Microphone please Email me at.....

va3sw@...

73.....ROB VA3SW

Robert S. Ross
London, Ontario CANADA

12285. Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 00:15:55 UTC
From: slowcountry1
Topic: 12272 Message: 12285

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
> >> now working. I believe that is what we were working on! I have several of these little 'projects'
> >> going on at a time and it helps to keep them straight if you leave previous message content in place.
> >>
> >> Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
> >> problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
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> >> is V18 or associated wiring/switching.
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> >> If you are seeing 200W OUTPUT on 10M, you need to do the neutralization procedure, check your dummy
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> >>
> >> --
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
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> >>
> >> slowcountry1 wrote:
> >>> Ok, here is the story. After searching through the schematic I changed out what I believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the

transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27 ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
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> >>>
> >>> Thanks,
> >>>
> >>> Doug
> >>>
> >>>
> > Gary,
> >
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> >
> > I'm afraid I did something wrong.
> >
>
> Doug -
>
> OK. Hoped it would be something easy. Really it can't be too bad, because the entire transmitter
> is operational in TUNE, with the exception of the Mic Amp and switching. I don't 'think' any of the
> audio wiring is around the relay, so ....
>
> First question. Does the VOX operate when you talk into the microphone? VOX GAIN advanced 1/2
> rotation or more? ANTI-VOX full CCW.?
>
> XMIT GAIN advanced?
>
> The MIC audio comes out of the MIC AMP on Pin 8 of V18, through a 0.47 uF film cap to shielded
> cable, to the front side of the front wafer of the MODE switch. Then a shielded cable

from the
> switch to R76 on the bottom of T-14.
>

Gary,

First off, I owe you a huge apology as I know you are extremely busy and I have asked a million questions of you; this one being very unnecessary.

I worked very diligently, into the late hours, removing the PC board to access D9 and D11. I made notes and was very careful not to get solder on adjacent traces, equipment or allow old solder pieces to remain after my work. I looked the rig over a hundred times to ensure that I did the best job possible. Removing and reinstalling the PC board was quite a tedious and cumbersome task.

I always employ the K.I.S.S. method on any job that I do. Yesterday somehow I forgot the rule and began searching for a very difficult problem that was simple and that I created myself, unknown until now. I was unable to work on the unit until about an hour ago; I spent the day at my daughters volleyball tournament. I poured over the schematics between games and went over every item in my head that I had worked on. When I came home I took your instructions and began examining every part of V18, the PC board that the .47uf cap resides on, the shielded wire and mode switch, I never managed to look at the mic jack. I just so happened to look at the jack and realized that sometime during my project I managed to press down on the disc cap that goes from the mic jack to the PC board that pin 8 of V18 goes to, the long cap lead shorted out the mic jack.

Painfully I can admit that I have wasted your valuable time and a bunch of my time. The good news is that the unit works as it should; the power switch is fixed, the plate meter bouncing is fixed and I again have a relative output. I have ordered the cap replacement kit from Hayseed Hams as this is the next task at hand. I am going to forgo the cleanup process until I research the dry labeling you suggested for the tube compliment.

Prior to replacing the original plate meter, I disassembled it looking to see what was used for dampening. The only thing in there is a magnet that is also used for zero setting. The coil wire, which I managed to break, is soldered to the incoming terminal and makes a U shape to the screw that holds the coil board in place. The other incoming terminal does the same thing. I'm wondering if D9 was not only responsible for the absence of relative output but also if the U shape created a field to assist in dampening? Needless to say, the meter is pretty well shot as I tried to add a little tension in the bracket that holds the needle to see if that would help the bounce and have made it stick in some areas. I took pictures of the meter parts if ever someone wants to know whats inside.

Thanks again for all your assistance!

Doug Coffman

12286. Re: Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 00:19:12 UTC
From: Mark Pilant
Topic: 12266 Message: 12286

I just finished up with the alignment, and did some band cruising to see how the receiver did. (It did very well.) I heard lots of activity on the bands (it seems there is a contest going on :-)

I switched over to my dummy load to see how the transmitter would do. Here are the power outputs as read on my Drake MN-2700:

80m 165w
40m 150w (this may be a little off)
20m 160w
15m 150w
10m 130w (for all three positions)

I did test SSB into the dummy load with a mic I normally use on my TR-3, and could watch the meter on the -2700 "dance" around as I talked.

The real test will be getting on the air, which I hope to be able to do in the next couple of days.

If everything goes OK, I'll write everything up so it gets into the archives.

73

- Mark N1VQW

12287. TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 00:41:27 UTC
From: William Houghton
Topic: 12287 Message: 12287

Hi Garey,

Is there a place where you can measure the 9MHz osc with a freq counter to adjust C130?
A hearing loss makes it hard for me to adjust by trying to get the same pitch by switching sidebands back and forth.

Perhaps the cathode of V16?

Thanks and 73,

Bill

[Non-text portions of this message have been removed]

12288. Re: [DrakeRadio] Re: TR-4CW No transmit audio however full tune up power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 02:45:09 UTC
From: Garey Barrell
Topic: 12272 Message: 12288

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> slowcountry1 wrote:
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> Progress!!. Yes, those diodes are fun to access. I assume that your REL OUT meter and control are
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>>>> Anyway, If you are reading idle current, and TUNE mode produces the expected output, the most likely
>>>> problem is a microphone cartridge or miswire. The mic is Tip to PTT and Ring to Input. The relay
>>>> wiring and operation in TUNE and SSB is essentially the same, so if TUNE works the only thing left
>>>> is V18 or associated wiring/switching.
>>>>
>>>> The 27 ohm resistor is R192 and is a 'fuse' for the +250VDC line. Do NOT replace it with a larger
>>>> power resistor, it should be a 27 ohm, carbon composition resistor. They DO fail after years,
>>>> because they ARE actually overloaded. Usually a darkened one indicates electrolytic capacitor
>>>> leakage in C145. One that is split oftenindicates a short on the +250 VDC line.
>>>>
>>>> If you are seeing 200W OUTPUT on 10M, you need to do the neutralization procedure, check your dummy
>>>> load, and wattmeter for accuracy. Anything over ~150W on 10M is highly suspect.
>>>>
>>>> --
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> Ok, here is the story. After searching through the schematic I changed out what I

believe to be D9 and D11. I found these two 1N270 diodes on the PC board that hold the transmit relay; they were one on top of the other at the bottom of the board. One had a dead short and the other appeared to be ok. I replaced them both but used 2 1N4148 diodes as the manual calls for and that's what I had available. In addition, I replaced a bunt 27 ohm resister on the same board at the top next to the relay. I also replaced the plate meter and power / volume switch.
>>>>>
>>>>> I turned the unit on and it powered up as expected. I checked the bias voltage; it was just a touch high so I reset it for 100ma. I tuned up the unit on 10M and I easily achieved 200watts output. The current problem is that when I key the microphone, the plate meter shows 100ma and no higher when I talk into the microphone and as expected my wattmeter indicates a zero output.
>>>>>
>>>>> Getting the relay PC board in a position to replace the diodes was quite a bit of work and required removing a number of wires. I placed them back where they came from and verified my work against one of my parts rigs. I fear that I have missed something that I just cannot see. Are there any suspect components or areas that I should start pursuing?
>>>>>
>>>>> Thanks,
>>>>>
>>>>> Doug
>>>>>
>>>>>
>>> Gary,
>>>
>>> The transmit audio was perfectly fine prior to my work. You were guiding me through a plate meter bouncing problem and no relative output on the plate meter when the load control was pressed. The power switch was open and I had shorted it and used a surge suppressor switch to turn it on and off. The rig transmitted just fine until I did the work this evening. I have tried multiple microphones that I know to be good. I have unseated. And reseated all the tubes except the finals.
>>>
>>> I'm afraid I did something wrong.
>>>
>> Doug -
>>
>> OK. Hoped it would be something easy. Really it can't be too bad, because the entire transmitter
>> is operational in TUNE, with the exception of the Mic Amp and switching. I don't 'think' any of the
>> audio wiring is around the relay, so ....
>>
>> First question. Does the VOX operate when you talk into the microphone? VOX GAIN advanced 1/2
>> rotation or more? ANTI-VOX full CCW.?
>>
>> XMIT GAIN advanced?
>>
>> The MIC audio comes out of the MIC AMP on Pin 8 of V18, through a 0.47 uF film cap to shielded
>> cable, to the front side of the front wafer of the MODE switch. Then a shielded cable

from the
>> switch to R76 on the bottom of T-14.
>>
> Gary,
>
> First off, I owe you a huge apology as I know you are extremely busy and I have asked a million questions of you; this one being very unnecessary.
>
> I worked very diligently, into the late hours, removing the PC board to access D9 and D11. I made notes and was very careful not to get solder on adjacent traces, equipment or allow old solder pieces to remain after my work. I looked the rig over a hundred times to ensure that I did the best job possible. Removing and reinstalling the PC board was quite a tedious and cumbersome task.
>
> I always employ the K.I.S.S. method on any job that I do. Yesterday somehow I forgot the rule and began searching for a very difficult problem that was simple and that I created myself, unknown until now. I was unable to work on the unit until about an hour ago; I spent the day at my daughters volleyball tournament. I poured over the schematics between games and went over every item in my head that I had worked on. When I came home I took your instructions and began examining every part of V18, the PC board that the .47uf cap resides on, the shielded wire and mode switch, I never managed to look at the mic jack. I just so happened to look at the jack and realized that sometime during my project I managed to press down on the disc cap that goes from the mic jack to the PC board that pin 8 of V18 goes to, the long cap lead shorted out the mic jack.
>
> Painfully I can admit that I have wasted your valuable time and a bunch of my time. The good news is that the unit works as it should; the power switch is fixed, the plate meter bouncing is fixed and I again have a relative output. I have ordered the cap replacement kit from Hayseed Hams as this is the next task at hand. I am going to forgo the cleanup process until I research the dry labeling you suggested for the tube compliment.
>
> Prior to replacing the original plate meter, I disassembled it looking to see what was used for dampening. The only thing in there is a magnet that is also used for zero setting. The coil wire, which I managed to break, is soldered to the incoming terminal and makes a U shape to the screw that holds the coil board in place. The other incoming terminal does the same thing. I'm wondering if D9 was not only responsible for the absence of relative output but also if the U shape created a field to assist in dampening? Needless to say, the meter is pretty well shot as I tried to add a little tension in the bracket that holds the needle to see if that would help the bounce and have made it stick in some areas. I took pictures of the meter parts if ever someone wants to know whats inside.
>
> Thanks again for all your assistance!
>
> Doug Coffman
>
Doug -

Cool!!! Love the easy fixes, even if theyare sometimes skipped over in our search and take a little
longer to track down. A good catch, in any event.

Anyway, a successful fix is never a waste of time.!

You have an excellent thought with possible diode damping of the PLATE meter. There is yet another
diode buried under the wiring on the Relay Board, D12, in series with a 47 ohm resistor, which has
to also have an effect on the meter. I must admit I never thought much about it, as very few use
the OUTPUT Metering any more. It was very handy for mobile use, and even home station use when
wattmeters were so much rarer. Now that every station has at least one wattmeter in line no one
bothers with the push button any more!

Might be worth some experimentation next time a bouncy meter shows up!

Again, welcome to the group, and congratulations on a successful fix!

--
73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

12289. Re: [DrakeRadio] TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 02:51:09 UTC
From: Garey Barrell
Topic: 12287 Message: 12289

Hi Bill -

Best place is probably either of the output leads of T14.

If not enough signal there, then the wiper of R85 is good.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Is there a place where you can measure the 9MHz osc with a freq counter to
> adjust C130?
> A hearing loss makes it hard for me to adjust by trying to get the same pitch by
> switching sidebands back and forth.
>
> Perhaps the cathode of V16?
>
> Thanks and 73,
>
> Bill
>

12290. Re: [DrakeRadio] Re: Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 03:04:40 UTC
From: Garey Barrell
Topic: 12266 Message: 12290

Mark -

You didn't specify, but I assume these readings were made in TUNE position, and tuned for maximum
output?

They are a little low, probably a result of PA tube weakness.

Typical Output in TUNE MODE with NEW PA tubes and fully aligned:

80M= 200W

40M = 200W

20M = 200W

15M = 175W

10M - 150W

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> I just finished up with the alignment, and did some band cruising
> to see how the receiver did. (It did very well.) I heard lots of
> activity on the bands (it seems there is a contest going on :-)
>
> I switched over to my dummy load to see how the transmitter would
> do. Here are the power outputs as read on my Drake MN-2700:
>
> 80m 165w
> 40m 150w (this may be a little off)
> 20m 160w
> 15m 150w
> 10m 130w (for all three positions)
>
> I did test SSB into the dummy load with a mic I normally use on my
> TR-3, and could watch the meter on the -2700 "dance" around as I
> talked.
>
> The real test will be getting on the air, which I hope to be able to
> do in the next couple of days.

>
> If everything goes OK, I'll write everything up so it gets into the
> archives.
>
> 73
>
> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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12291. Re: [DrakeRadio] TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 07:19:41 UTC
From: William Houghton
Topic: 12287 Message: 12291

Hi Garey,

The wiper of R85 was a good choice. Unfortunately the closest adjustment I can make to 9MHz is 8.99954.

73,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, March 2, 2013 6:51:11 PM
Subject: Re: [DrakeRadio] TR-3 9MHz osc adjustment

Hi Bill -

Best place is probably either of the output leads of T14.

If not enough signal there, then the wiper of R85 is good.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

William Houghton wrote:
> Hi Garey,
>
> Is there a place where you can measure the 9MHz osc with a freq counter to
> adjust C130?
> A hearing loss makes it hard for me to adjust by trying to get the same pitch
>by
> switching sidebands back and forth.
>
> Perhaps the cathode of V16?
>
> Thanks and 73,
>
> Bill
>

[Non-text portions of this message have been removed]

12292. TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 10:12:38 UTC
From: Victor
Topic: 12292 Message: 12292

Hello
Got a problem with my TR7. The VCO's won't lock. Occaisionally the rig works for a couple of minutes and I get sigs but then goes out of lock. The fixed receive button has no effect and the bandswitch does nothing. The display shows either 17mhz or 32 mhz.
I've had it in for repair but they couldn't find the prob. but did say they found a lot of dry joints which they have re-run. I also assume they have checked the connectors.
What I am trying to find out is if I get another VCO board (if I can find one) is there a realistic chance that it would fix the problem or could the fault be almost anywhere in the rig.
That is a very broad question but had to ask.

73

Vic
G4JSS

12293. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 11:26:30 UTC
From: Dieter Horst
Topic: 12292 Message: 12293

Hello Victor and group,

I have repaired quite some things in my TR7 and R7s but never came across a VCO issue.
But looking at the block diagram in the service manual, you can see that the VCO board AND the translator board could be involved. Even the digital control board plays a role as it sets the divider. So it is hard to tell whether a new VCO board would fix your issue.

I assume you have done the usual board reseating trick already. If not, do that first. Remove DR7, VCO and translator board, examine the contacts and carefully put it all back.

There is one thing people have often come across: the 24 V supply which is needed to tune your VCO! It is derived at the power supply board with a dc/dc converter. The core of this converter sometimes gets loose or even falls off. So if you want to start trouble shooting yourself, measure if all the voltages are fine when you error condition happens. Try to measure close to the VCO board, e. g. at the parent board.

73s de Dieter DL5RDO

Am 03.03.2013 11:12, schrieb Victor:
>
> Hello
> Got a problem with my TR7. The VCO's won't lock. Occaisionally the rig
> works for a couple of minutes and I get sigs but then goes out of
> lock. The fixed receive button has no effect and the bandswitch does
> nothing. The display shows either 17mhz or 32 mhz.
> I've had it in for repair but they couldn't find the prob. but did say
> they found a lot of dry joints which they have re-run. I also assume
> they have checked the connectors.
> What I am trying to find out is if I get another VCO board (if I can
> find one) is there a realistic chance that it would fix the problem
> or could the fault be almost anywhere in the rig.
> That is a very broad question but had to ask.
>
> 73
>
> Vic
> G4JSS
>
>

[Non-text portions of this message have been removed]

12294. Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 15:08:52 UTC
From: jerry_k9gas
Topic: 12294 Message: 12294

Hi All,
I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS

12295. Re: [DrakeRadio] TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 15:36:11 UTC
From: Mark Pilant
Topic: 12287 Message: 12295

I had another thought about adjusting the 9 MHz oscillator.

Would it be reasonable to feed an AM modulated signal (say 800 Hz) into the antenna at a frequency appropriate for the band/dial setting and then adjust C130 until the tone was the same between USB and LSB?

It seems like this might be a good way to adjust the oscillator to the rig.

Just a thought.

73

- Mark N1VQW

12296. Re: [DrakeRadio] TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 15:39:57 UTC
From: Garey Barrell
Topic: 12287 Message: 12296

Bill -

How confident are you in the counter cal??

Are you using a scope probe on the counter, or are you connecting directly to R85? It's possible
your probe may bedragging the frequency down. If your counter has a high impedance input, try
making a three or four turn loop of wire and hold it near the 6GX6 to see if you can pick up enough.

Aside from that, any TR-3/4 CO crystal will work, assuming it hasn't aged out of range. Yours is
interesting since it seems to have aged DOWN. You might also try another 6GX6.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> The wiper of R85 was a good choice. Unfortunately the closest adjustment I can
> make to 9MHz is 8.99954.
>
>
> 73,
>
> Bill
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, March 2, 2013 6:51:11 PM
> Subject: Re: [DrakeRadio] TR-3 9MHz osc adjustment
>
>
> Hi Bill -
>
> Best place is probably either of the output leads of T14.

>
> If not enough signal there, then the wiper of R85 is good.
>
> --
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
>
> William Houghton wrote:
>> Hi Garey,
>>
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>> adjust C130?
>> A hearing loss makes it hard for me to adjust by trying to get the same pitch
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>> switching sidebands back and forth.
>>
>> Perhaps the cathode of V16?
>>
>> Thanks and 73,
>>
>> Bill
>>
>
>
>
> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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12297. Re: [DrakeRadio] Re: Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 15:43:01 UTC
From: Mark Pilant
Topic: 12266 Message: 12297

Hi Garey.

> You didn't specify, but I assume these readings were made in
> TUNE position, and tuned for maximum output?

That is correct. In all cases, the max output came at about a
450 mA reading on the plate current meter.

> They are a little low, probably a result of PA tube weakness.

Could very well be. Given the "crud" on the chassis, I expect
the rig had been sitting for some time; not out in the elements,
but probably a shed or something. (Thus the acorn shells which
came out when I turned the rig over at one point.)

I'm planning to order a new set of finals, I just need to make
sure I can get tubes which will fit in the final "cage".

Until then, I'm going to try one or two more tests, and then
see if I can check in to the Drake net this afternoon.

73

- Mark N1VQW

12298. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 15:44:39 UTC
From: Jim Shorney
Topic: 12292 Message: 12298

On Sun, 03 Mar 2013 12:26:30 +0100, Dieter Horst wrote:

>There is one thing people have often come across: the 24 V supply which
>is needed to tune your VCO! It is derived at the power supply board with
>a dc/dc converter. The core of this converter sometimes gets loose or
>even falls off.

Also, the electrolytic capacitor(s) on this board should be replaced. Don't bother with checking them to test if they are good, just DO IT. This is a critical point, strange things will happen when the 24V filter even starts to fail. And they are starting to fail. This should be a standard replacement on any TR-7. Use parts rated for 105C temperature. The Tantalum caps should be fine, they can be left alone.

Of course, you will need to re-adjust the fixed passband and +10V pots after working on the PS board.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12299. ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 14:20:49 UTC
From: David Winfree
Topic: 12299 Message: 12299

Hi all; a brief search didn't result in a finding, but what is the manuf. part no./avail. for the linear relay male plug to fit into the AC4 recept, curiously labeled "VOX RLY"?

Just got a SB220, and now anxious to try it out.

TIA, WB4SPT

12300. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 16:00:27 UTC
From: Garey Barrell
Topic: 12292 Message: 12300

Vic -

First suspect is the +24 VDC supply. This is a little DC-DC converter on the Power Supply board,
which includes a ferrite cored transformer. The core consists of a couple of "E" cores 'face-to-face' and glued together. After only 30 years or so the glue is letting go, allowing the
'top' half of the core to fall into the bottom of the radio. If whoever serviced the radio wasn't
aware of this, the loose core is often lost unnoticed when the coversare removed. Looking down from
the front of the radio, you can see the transformer, it has one wrap of white hookup wire wrapped
around it. If you see the three 'ends' of the lower "E", that's the problem. If you see just the
straight 'back' of the "E" it's still possible that the core is 'gapped' and you'll need to check
the voltage. It should be very close to +24 VDC, 78L24 regulator.

The 17 and 32 MHz frequencies are thecorrect 'unlocked' frequencies for the VCOs.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Victor wrote:
> Hello
> Got a problem with my TR7. The VCO's won't lock. Occaisionally the rig works for a couple of minutes and I get sigs but then goes out of lock. The fixed receive button has no effect and the bandswitch does nothing. The display shows either 17mhz or 32 mhz.
> I've had it in for repair but they couldn't find the prob. but did say they found a lot of dry joints which they have re-run. I also assume they have checked the connectors.
> What I am trying to find out is if I get another VCO board (if I can find one) is there a realistic chance that it would fix the problem or could the fault be almost anywhere in the rig.
> That is a very broad question but had to ask.
>
> 73
>
> Vic
> G4JSS
>

12301. Re: [DrakeRadio] Re: Close to getting by TR-4 done

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 16:17:29 UTC
From: Garey Barrell
Topic: 12266 Message: 12301

Mark -

OK. Sounds good. Nothing wrong with running those tubes for years yet. The difference in output
power is barely discernible at the other end, and it doesn't hurt anything else.

The 'tootall' tubes are interesting. They're outside of the size specifications of the 'big four',
Sylvania, Zenith, RCA & GE, by a considerable amount. I've never seen any by these mfrs. I'm
pretty sure Sylvania didn't rebrand, and Zenith was a contract with Sylvania. I guess it's possible
RCA and/or GE rebranded, but....

Anyway, just tell the seller you want tubes with a maximum 'seated height' of 3.125".

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> Hi Garey.
>
> > You didn't specify, but I assume these readings were made in
> > TUNE position, and tuned for maximum output?
>
> That is correct. In all cases, the max output came at about a
> 450 mA reading on the plate current meter.
>
> > They are a little low, probably a result of PA tube weakness.
>
> Could very well be. Given the "crud" on the chassis, I expect
> the rig had been sitting for some time; not out in the elements,
> but probably a shed or something. (Thus the acorn shells which
> came out when I turned the rig over at one point.)
>
> I'm planning to order a new set of finals, I just need to make
> sure I can get tubes which will fit in the final "cage".
>
> Until then, I'm going to try one or two more tests, and then
> see if I can check in to the Drake net this afternoon.
>

> 73
>
> - Mark N1VQW
>
>

12302. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 16:54:13 UTC
From: g4jss@tiscali.co.uk
Topic: 12292 Message: 12302

Garey, Jim, Dieter and others,
Thank you for your replies and suggestions. It seems the first point to look at is the +24v supply. I did
open it when it came back from repair and later found what looked like a ferrite bead on the shack floor - but that could have come from
anywhere. Just one other question, if the +24v supply is faulty (part of the core missing) would the rig briefly work OK for a short
period (secs) and then go back to unlocked?

Cheers

Vic

12303. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 17:43:15 UTC
From: Don Cunningham
Topic: 12299 Message: 12303

David,

That plug is near "unobtanium" anymore, and usually very expensive if you find one. Drake made a "kit" later to convert that to an RCA jack, and John Kriner had some of those for sale on his Ebay store a while back. I haven't looked lately, but John is "tr7dude" on Ebay and easily found. The kits are also expensive, but not as bad as the plug. Hope that helps some.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12304. Re: [DrakeRadio] Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 18:05:47 UTC
From: Garey Barrell
Topic: 12294 Message: 12304

Jerry -

Have youtried the 'other' sideband?? Possibly bad filter or oxidation of filter pins/sockets.

Better/worse if transceive using the T-4XCas control?

Normal operation of 3rd Mixer LO (5.645MHz).

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

jerry_k9gas wrote:
> Hi All,
> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks,
Jerry K9GAS
>

12305. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 18:26:59 UTC
From: Joe
Topic: 12299 Message: 12305

I **believe** I have two of the kits...bought them a l-o-n-g time ago...My curiosity is up...gonna have to dig out my boxes of L-4B parts and look.....

Joe - WA6RKN

----- Original Message -----
From: "Don Cunningham" <donc@...>
Subject: Re: [DrakeRadio] ac4 ps connector for linear key

> David,
>
> That plug is near "unobtanium" anymore, and usually very expensive if you
> find one. Drake made a "kit" later to convert that to an RCA jack, and
> John Kriner had some of those for sale on his Ebay store a while back. I
> haven't looked lately, but John is "tr7dude" on Ebay and easily found.
> The kits are also expensive, but not as bad as the plug. Hope that helps
> some.

12306. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 19:48:27 UTC
From: jerry_k9gas
Topic: 12294 Message: 12306

Hi Garey,
yes it's pretty much all across. I paid closer attention and it's even down on AM.
I'm comparing it with my solid state rig. But, it was better than anything I've had, but it's really down. Only very strong stations will get it move the meter. S7 signals on my solid state, is not moving my receive on the R4C and the audio is way down.
I was going to take it down and start a cleaning process of the pins and all the contacts and
see what that does. This thing was a very hot receiver, not now.
Thanks,
Jerry K9GAS

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Jerry -
>
> Have youtried the 'other' sideband?? Possibly bad filter or oxidation of filter pins/sockets.
>
> Better/worse if transceive using the T-4XCas control?
>
> Normal operation of 3rd Mixer LO (5.645MHz).
>
> --
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> jerry_k9gas wrote:
> > Hi All,
> > I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks,
Jerry K9GAS
> >
>

12307. Re: [DrakeRadio] TR-3 9MHz osc adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 19:50:53 UTC
From: William Houghton
Topic: 12287 Message: 12307

Hi Garey,

I'm very confident in the freq counter. I have a Stanford Research DS- digitally synthesized signal generator that has a TCXO timebase. The counter and SR gen agree.

I used a 10X scope probe to connect to the counter.

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sun, March 3, 2013 7:39:56 AM
Subject: Re: [DrakeRadio] TR-3 9MHz osc adjustment

Bill -

How confident are you in the counter cal??

Are you using a scope probe on the counter, or are you connecting directly to R85? It's possible

your probe may bedragging the frequency down. If your counter has a high impedance input, try

making a three or four turn loop of wire and hold it near the 6GX6 to see if you can pick up enough.

Aside from that, any TR-3/4 CO crystal will work, assuming it hasn't aged out of range. Yours is

interesting since it seems to have aged DOWN. You might also try another 6GX6.

--
73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

William Houghton wrote:
> Hi Garey,
>
> The wiper of R85 was a good choice. Unfortunately the closest adjustment I can
> make to 9MHz is 8.99954.
>
>
> 73,
>

> Bill
>
>
>
> _____
> From: Garey Barrell k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, March 2, 2013 6:51:11 PM
> Subject: Re: [DrakeRadio] TR-3 9MHz osc adjustment
>
>
> Hi Bill -
>
> Best place is probably either of the output leads of T14.
>
> If not enough signal there, then the wiper of R85 is good.
>
> --
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> William Houghton wrote:
>> Hi Garey,
>>
>> Is there a place where you can measure the 9MHz osc with a freq counter to
>> adjust C130?
>> A hearing loss makes it hard for me to adjust by trying to get the same pitch
>> by
>> switching sidebands back and forth.
>>
>> Perhaps the cathode of V16?
>>
>> Thanks and 73,
>>
>> Bill
>>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links

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[Non-text portions of this message have been removed]

12308. TR-4Cw Plate meter information and pictures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 19:53:16 UTC
From: slowcountry1
Topic: 12308 Message: 12308

All,

I have uploaded two pictures of the TR-4Cw plate meter internal assembly. I also added some illustration. Prior to destroying a meter like I did, check that D9,D11 and D12 are all good. The configuration of the meter suggests that electrical dampening of the needle may be used here.

In addition, the coil wire is hair fine and breaks very easily. The meter comes apart very easily but with big clumsy hands, I managed to break it.

Regards,

Doug Coffman

12309. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 21:06:50 UTC
From: amfone
Topic: 12299 Message: 12309

Not sure what "linear Key" means, never heard that term what are you trying to do?

73 Tim
WB8UHZ

_____
From: David Winfree <dmw11038@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, March 3, 2013 9:20 AM
Subject: [DrakeRadio] ac4 ps connector for linear key

Hi all; a brief search didn't result in a finding, but what is the manuf. part no./avail. for the linear relay male plug to fit into the AC4 recept, curiously labeled "VOXRLY"?

Just got a SB220, and now anxious to try it out.

TIA, WB4SPT

[Non-text portions of this message have been removed]

12310. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 21:44:36 UTC
From: Joe
Topic: 12299 Message: 12310

I just finished looking through my L-4B stuff and couldn't find anything, but! Loa nd behold, I had already modified my amps. Silly me...can't remember anything any longer with my stroke affected memory! Oh well.....

Joe - WA6RKN (I *THINK* that is my call! Heh.)

----- Original Message -----
From: "amfone" <amfone20000@...>
Subject: Re: [DrakeRadio] ac4 ps connector for linear key

12311. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 22:14:51 UTC
From: Ernie Gray
Topic: 12299 Message: 12311

I have several of those 2 pin plugs.

Ernie Gray
W1MRQ
PO Box 548
Weare, NH, 03281
603-770-7408

From: amfone <amfone20000@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Sunday, March 3, 2013 4:06 PM
Subject: Re: [DrakeRadio] ac4 ps connector for linear key

Not sure what "linear Key" means, never heard that term what are you trying to do?

73 Tim
WB8UHZ

From: David Winfree mailto:dmw11038%40gmail.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Sunday, March 3, 2013 9:20 AM
Subject: [DrakeRadio] ac4 ps connector for linear key

Hi all; a brief search didn't result in a finding, but what is the manuf. part no./avail. for the linear relay male plug to fit into the AC4 recept, curiously labeled "VOXRLY"?

Just got a SB220, and now anxious to try it out.

TIA, WB4SPT

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12312. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 22:24:10 UTC
From: Joe
Topic: 12299 Message: 12312

It's not the 2 pin plug...it is the 2 pin to RCA jack modification kit (The Drake one) so that you can plug in the relay line to the L-4. (Most are RCA jacks) Someone used to make and sell a cable with an RCA jack on one end and the 2 pin Drake plug on the other end but I didn't see any on eBay.

Joe - WA6RKN

----- Original Message -----
From: "Ernie Gray" <w1mrq@...>
Subject: Re: [DrakeRadio] ac4 ps connector for linear key

I have several of those 2 pin plugs.

12313. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-03 22:54:42 UTC
From: Ken Winterling
Topic: 12299 Message: 12313

David,

If you do not want to make a plate with an RCA female to replace the two pin jack then you could make a short pig tail with an RCA female on one end and route the cable through a hole in the chassis. The leads from the cable would be soldered soldered across the two pin socket. The relay contacts in the T-4XC are isolated, neither is at ground potential, so it doesn't matter which side of the plug is wired to the shell or center contact. You can then use a "standard" RCA male/RCA male cable between the pig tail and your amp.

Ken
WA2LBI

On Sun, Mar 3, 2013 at 9:20 AM, David Winfree <dmw11038@...> wrote:

> Hi all; a brief search didn't result in a finding, but what is the manuf.
> part no./avail. for the linear relay male plug to fit into the AC4 recept,
> curiously labeled "VOX RLY"?
>
> Just got a SB220, and now anxious to try it out.
>

[Non-text portions of this message have been removed]

12314. Re: [DrakeRadio] Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 00:31:22 UTC
From: Steve Wedge
Topic: 12294 Message: 12314

I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.

That filter isn't easy to reach: it's on the main chassis and not on the rear panel.

Good luck...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: jerry_k9gas
Sent: Sunday, March 03, 2013 10:08 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Low SSB receive R4C

Hi All,
I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS

[Non-text portions of this message have been removed]

12315. power accessory connector for R4 series

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 00:46:35 UTC
From: David Winfree
Topic: 12315 Message: 12315

I'm tapping off the 6.3VAC to run a Tx muffin fan. It's a 12v DC fan, so a diode makes it nice and quiet. Is the 4 pin round connector available?

WB4SPT

12316. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 01:50:11 UTC
From: jerry_k9gas
Topic: 12294 Message: 12316

Well even though it didn't look dirty or oxidized at all, a good cleaning fixed it right up.
Cleaned the 6ba6 socket and finished up with some deoxit on the pins and I have full receive again!!
Jerry K9GAS

--- In DrakeRadio@yahoogroups.com, "jerry_k9gas" <gsitton@...> wrote:
>
> Hi Garey,
> yes it's pretty much all across. I paid closer attention and it's even down on AM.
> I'm comparing it with my solid state rig. But, it was better than anything I've had, but
> it's really down. Only very strong stations will get it move the meter. S7 signals on my solid state, is not moving my receive on the R4C and the audio is way down.
> I was going to take it down and start a cleaning process of the pins and all the contacts and
> see what that does. This thing was a very hot receiver, not now.
> Thanks,
> Jerry K9GAS
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Jerry -
> >
> > Have youtried the 'other' sideband?? Possibly bad filter or oxidation of filter pins/sockets.
> >
> > Better/worse if transceive using the T-4XCas control?
> >
> > Normal operation of 3rd Mixer LO (5.645MHz).
> >
> > --
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > jerry_k9gas wrote:
> > > Hi All,
> > > I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that

would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS
> > >
> >
>

12317. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 04:56:08 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 12317

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

12318. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 11:34:45 UTC
From: jerry_k9gas
Topic: 12294 Message: 12318

I was thinking about that, and it looks like a dismantle job. I thought I had it fixed but after it warms up, receive drops again. I'm going to replace the 6BA6 and see what that does. It's still an inexpensive tube.

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
>
> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
>
> Good luck...
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: jerry_k9gas
> Sent: Sunday, March 03, 2013 10:08 AM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Low SSB receive R4C
>
>
>
> Hi All,
> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks,
Jerry K9GAS
>
>
>
>
>
> [Non-text portions of this message have been removed]

>

12319. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 12:27:40 UTC
From: Robert Nohren
Topic: 12299 Message: 12319

Ebay is where I got mine.

Bob N4IBK
On Mar 3, 2013, at 5:24 PM, Joe wrote:

> It's not the 2 pin plug...it is the 2 pin to RCA jack modification kit (The
> Drake one) so that you can plug in the relay line to the L-4. (Most are RCA
> jacks) Someone used to make and sell a cable with an RCA jack on one end
> and the 2 pin Drake plug on the other end but I didn't see any on eBay.
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: "Ernie Gray" w1mrq@...>
> Subject: Re: [DrakeRadio] ac4 ps connector for linear key
>
> I have several of those 2 pin plugs.
>
>

[Non-text portions of this message have been removed]

12320. AC-4 Supply in theUK

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 13:16:07 UTC
From: daveincaol
Topic: 12320 Message: 12320

Does anyone in the UK have an AC-3 or 4 power supply for loan or purchase? I know I could buy one off Ebay but I don't intend paying $100 for carriage from the US.
Once I do get hold of one I will arrange for my 'local' ARC to check out a Tx and Rx that I have been asked to sell on.
Incidentally I only got one 'bite' when I listed the 5 items as available in an earlier post.
Anyone got any comment re this Item on Ebay: 181086635459. The 'asking' seems a tad unrealistic to me.

Dave B (onetime GM6WCF)

12321. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 13:33:49 UTC
From: Chgypsy@...
Topic: 12321 Message: 12321

daveincaol@... writes:

Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'
seems a tad unrealistic to me. Dave B (onetime GM6WCF
Have to agree, I was checking $ for my excess AC4, but that's out of line
even with a Heathkit board installed, (which I am assuming it was for that
price). Carl wd8nhk

[Non-text portions of this message have been removed]

12322. RE: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 13:57:40 UTC
From: Rich Arland
Topic: 12321 Message: 12322

The ad specifies "no mods" which I take to mean it is totally stock, no upgrade kit on the caps, etc.

I looked over his other items....his prices are way out of line on much of his stuff.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: Chgypsy@...
Date: Mon, 4 Mar 2013 08:33:49 -0500
Subject: Re: [DrakeRadio] AC-4 Supply

daveincaol@... writes:

Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'

seems a tad unrealistic to me. Dave B (onetime GM6WCF

Have to agree, I was checking $ for my excess AC4, but that's out of line

even with a Heathkit board installed, (which I am assuming it was for that

price). Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12323. WTB: Drake R8B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 14:12:36 UTC
From: Edward
Topic: 12321 Message: 12323

Ready to part with yours? Pls contact me off list. Thanks.

Ed NI5S

12324. R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 14:36:39 UTC
From: Steve Wedge
Topic: 12324 Message: 12324

Hi, Gang -

I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?

The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12325. Re: [DrakeRadio] ac4 ps connector for linear key

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 14:36:27 UTC
From: Chgypsy@...
Topic: 12299 Message: 12325

amfone20000@... writes:

Not sure what "linear Key" means, never heard that term what are you
trying to do? Tim WB8UHZ
Two pin socket on an AC4 power supply to key a linear relay. The
connector is very reminiscent of an old TV cheater cord socket. Carl wd8nhk

[Non-text portions of this message have been removed]

12326. Re: [DrakeRadio] R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 14:40:51 UTC
From: Eddy Swynar
Topic: 12324 Message: 12326

On 2013-03-04, at 9:36 AM, Steve Wedge wrote:

>
> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?
>
> The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?
>
>

Hi Steve,

You're not even close, I don't think...

The R-4 was the predecessor to the long line of R-4 derivatives that followed. i.e. the "A", "B", & the "C" versions. I understand that it's closest kin is the Drake 2B receiver.

I'm sure that Garey can shed a LOT more light on the subject than I am able to!

BTW, I have an R-4 here---and I LOVE it.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

12327. Re: [DrakeRadio] TR-4Cw Plate meter informa tion and pictures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 14:53:04 UTC
From: Henry L. Dorkin
Topic: 12327 Message: 12327

This message was originally HTML formatted. View in a HTML capable client to see the original version.\r\n\r\n Hi - where does one find the pictures? They are not showing up on my e-mail.

Tnx -

Hank, WM1V

---- Original Message ----
From: "slowcountry1" dcoffman@...
Sent: 3/3/2013 2:53:29 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR-4Cw Plate meter information and pictures

All,

I have uploaded two pictures of the TR-4Cw plate meter internal assembly. I also added some illustration. Prior to destroying a meter like I did, check that D9,D11 and D12 are all good. The configuration of the meter suggests that electrical dampening of the needle may be used here.

In addition, the coil wire is hair fine and breaks very easily. The meter comes apart very easily but with big clumsy hands, I managed to break it.

Regards,

Doug Coffman

[Non-text portions of this message have been removed]

12328. Re: [DrakeRadio] R-4 age

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 15:02:16 UTC
From: Chgypsy@...
Topic: 12328 Message: 12328

w1es1982@... writes:

I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61.
Hi Steve,
Going another way; I have my original R4 # 270 My manual shows the schematic number as 29650001 which would be Feb 9, 1965 serial number 0001 which would indicate it was the first applicable schematic.

On the other hand...the T4X records on WB4HFN indicate that there were 10000 units in 1965 with another 2000 built to 1966 (now it could have been a VERY popular item that year). In any case subtracting 2k units per year from the 1965 would mean that the original T4X was about 1960 and I always thought that Drake brought out the R & T at the same time.

Anyone else going to wade into this? Carl wd8nhk

[Non-text portions of this message have been removed]

12329. Re: [DrakeRadio] TR-4Cw Plate meter information and pictures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 15:06:37 UTC
From: Chgypsy@...
Topic: 12308 Message: 12329

dorkinh@... writes:

This message was originally HTML formatted. View in a HTML capable client to see the original version.\r\n\r\n Hi - where does one find the pictures? They are not showing up on my e-mail.
Hank, WM1V
On the group site in Yahoo. Also there was a posting of an "update" this morning. Carl wd8nhk

[Non-text portions of this message have been removed]

12330. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 15:27:45 UTC
From: Garey Barrell
Topic: 12294 Message: 12330

Jerry -

Might be the tube..... Not likely though.... I'd look for a bad solder joint, looking first
under the 6BA6 you 'fixed' it with yesterday.

Do you have any accessory IF filters? If so, does selecting one of them change the situation? If
nofilters available, stick a 150 ohm, 2W resistor (any low value) diagonally between the 'hot' legs
of one of the accessory sockets and see if selecting that filter position 'fixes' things.

If it works again the next time you turn it on, check the Plate, Screen and Cathode voltages on the
first five tubes and recordthem. Then, when it quits again, recheck those same readings.

If it does NOT work the next time you turn it on, make those same readings anyway and see how they
compare with the Voltage chart in the manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

jerry_k9gas wrote:
> I was thinking about that, and it looks like a dismantle job. I thought I had it fixed
> but after it warms up, receive drops again. I'm going to replace the 6BA6 and see what that does. It's still an inexpensive tube.
>
> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
>>
>> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
>>
>> Good luck...
>>
>> Steve Wedge, W1ES/4
>>
>>
>> From: jerry_k9gas
>> Sent: Sunday, March 03, 2013 10:08 AM

>> To: DrakeRadio@yahoogroups.com
>> Subject: [DrakeRadio] Low SSB receive R4C
>>
>>
>>
>> Hi All,
>> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS
>>
>>

12331. Re: [DrakeRadio] AC-4 Supply in theUK

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 15:43:42 UTC
From: Steve Wedge
Topic: 12320 Message: 12331

There was someone recently on here who is in the UK who had a lot of Drake equipment to sell. Perhaps he'll see this.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: daveincaol
Sent: Monday, March 04, 2013 8:16 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] AC-4 Supply in theUK

Does anyone in the UK have an AC-3 or 4 power supply for loan or purchase? I know I could buy one off Ebay but I don't intend paying $100 for carriage from the US.
Once I do get hold of one I will arrange for my 'local' ARC to check out a Tx and Rx that I have been asked to sell on.
Incidentally I only got one 'bite' when I listed the 5 items as available in an earlier post.
Anyone got any comment re this Item on Ebay: 181086635459. The 'asking' seems a tad unrealistic to me.

Dave B (onetime GM6WCF)

[Non-text portions of this message have been removed]

12332. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:08:50 UTC
From: Joe
Topic: 12321 Message: 12332

WHOA!!! Talk about overpriced. I would be suspicious...that power cord (110V) is not stock..at least none of mine have the flat cable, nor a grounded plug. Hmmmmmm. Seriously, if he wants to sell it for that price, he at least should have it opened up and for everyone to see what the inside looks like.

He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!

Joe - WA6RKN

----- Original Message -----
From: <Chgypsy@...>
Subject: Re: [DrakeRadio] AC-4 Supply

> Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'
> seems a tad unrealistic to me. Dave B (onetime GM6WCF
> Have to agree, I was checking $ for my excess AC4, but that's out of line
> even with a Heathkit board installed, (which I am assuming it was for that
> price). Carl wd8nhk

12333. Re: [DrakeRadio] AC-4 Supply in theUK

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:21:00 UTC
From: Keith Evans
Topic: 12320 Message: 12333

Hi Dave
Are you still in GM Land ?
If so maybe someone in the GM DX Club might have one, maybe you can put a post on their reflector.

If you were in the South !! I could lend you one.
73
Keith G3VKW

----- Original Message -----
From: daveincaol
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 04, 2013 1:16 PM
Subject: [DrakeRadio] AC-4 Supply in theUK

Does anyone in the UK have an AC-3 or 4 power supply for loan or purchase? I know I could buy one off Ebay but I don't intend paying $100 for carriage from the US.
Once I do get hold of one I will arrange for my 'local' ARC to check out a Tx and Rx that I have been asked to sell on.
Incidentally I only got one 'bite' when I listed the 5 items as available in an earlier post.
Anyone got any comment re this Item on Ebay: 181086635459. The 'asking' seems a tad unrealistic to me.

Dave B (onetime GM6WCF)

[Non-text portions of this message have been removed]

12334. Re: [DrakeRadio] R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:32:59 UTC
From: Garey Barrell
Topic: 12324 Message: 12334

Weeellll, not exactly! :-)

1. Tube PTO!

2. INJ jack 'inside' on top of chassis.

3. Built Oct 64 - Oct 65

4. Approx 2000 built

5. VR tube added Feb 65

6. 12BZ6 RF Amp

7. Provision for crystal control. (Crystal at 5.455 MHzand 11.1 MHz above desired frequency)

That's all that comes to mind.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Hi, Gang -
>
> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?
>
> The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12335. Re: [DrakeRadio] R-4 age

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:37:28 UTC
From: Garey Barrell
Topic: 12328 Message: 12335

Carl -

Simple, the T-4X started with s/n 10000about August 1965. The pair was announced at the same time,
but deliveries of the T-4X came considerably later!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chgypsy@... wrote:
>
> w1es1982@... writes:
>
> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's
> website, I can't find much info on them but I seem to recall they were made
> between 1959 and '61.
> Hi Steve,
> Going another way; I have my original R4 # 270 My manual shows the
> schematic number as 29650001 which would be Feb 9, 1965 serial number 0001
> which would indicate it was the first applicable schematic.
>
> On the other hand...the T4X records on WB4HFN indicate that there were
> 10000 units in 1965 with another 2000 built to 1966 (now it could have been
> a VERY popular item that year). In any case subtracting 2k units per year
> from the 1965 would mean that the original T4X was about 1960 and I always
> thought that Drake brought out the R & T at the same time.
>
> Anyone else going to wade into this? Carl wd8nhk
>
> [Non-text portions of this message have been removed]
>
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> Yahoo! Groups Links
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12336. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:40:20 UTC
From: Steve Wedge
Topic: 12321 Message: 12336

The power cord is correct: the serial number in the 55000's is consistent with a 3-wire cord. It probably also has the 120/240 switch on the other side - which does make it worth more based on what I've seen them go for. Still, $350 is high but I have seen these sell for $250. I sold a nice one (totally stock) for $185 not long ago and it went fast.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Joe
Sent: Monday, March 04, 2013 11:08 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] AC-4 Supply

WHOA!!! Talk about overpriced. I would be suspicious...that power cord (110V) is not stock..at least none of mine have the flat cable, nor a grounded plug. Hmmmmmm. Seriously, if he wants to sell it for that price, he at least should have it opened up and for everyone to see what the inside looks like.

He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!

Joe - WA6RKN

----- Original Message -----
From: Chgypsy@...>
Subject: Re: [DrakeRadio] AC-4 Supply

> Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'
> seems a tad unrealistic to me. Dave B (onetime GM6WCF
> Have to agree, I was checking $ for my excess AC4, but that's out of line
> even with a Heathkit board installed, (which I am assuming it was for that
> price). Carl wd8nhk

[Non-text portions of this message have been removed]

12337. Re: [DrakeRadio] Ridiculas stuff

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:40:45 UTC
From: Chgypsy@...
Topic: 12337 Message: 12337

WA6RKN@... (mailto:WA6RKN@...) writes:

He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!Joe
- WA6RKN

Funny you bring that up, there is one at our local "ham house" that has no
cables or switchs etc and they are asking $9. Who knows its only been a
year..... Carl wd8nhk

[Non-text portions of this message have been removed]

12338. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:43:16 UTC
From: Steve Wedge
Topic: 12321 Message: 12338

Oops - I didn't look at the entire listing. Looks like the 120/240 switch is not there - even though the hole is there in the chassis for it. It's curious there's no silkscreen there for 120/240. Does anyone know if Drake was making two different versions at the time?

I'll never say never, but it's unlikely he'll get his asking price...

Steve Wedge, W1ES/4

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From: Joe
Sent: Monday, March 04, 2013 11:08 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] AC-4 Supply

WHOA!!! Talk about overpriced. I would be suspicious...that power cord (110V) is not stock..at least none of mine have the flat cable, nor a grounded plug. Hmmmmmm. Seriously, if he wants to sell it for that price, he at least should have it opened up and for everyone to see what the inside looks like.

He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!

Joe - WA6RKN

----- Original Message -----
From: Chgypsy@...>
Subject: Re: [DrakeRadio] AC-4 Supply

> Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'
> seems a tad unrealistic to me. Dave B (onetime GM6WCF
> Have to agree, I was checking $ for my excess AC4, but that's out of line
> even with a Heathkit board installed, (which I am assuming it was for that
> price). Carl wd8nhk

[Non-text portions of this message have been removed]

12339. Re: [DrakeRadio] R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 16:48:08 UTC
From: Steve Wedge
Topic: 12324 Message: 12339

Thanks, Garey.

Let me know if you'd like any pics of the innards for your files. This one looks like it's pretty clean but is not functioning. At any rate, I'll be doing my usual clean-up on it, so I'll have lots of opportunities to photograph it with my DSLR and some macro lenses.

I figured there weren't nearly as many made as the A's, B's or C's and what you've said confirms that.

Hoping the PO doesn't abuse this one like it just did to an R-4B I just sold...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, March 04, 2013 11:32 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4

Weeellll, not exactly! :-)

1. Tube PTO!

2. INJ jack 'inside' on top of chassis.

3. Built Oct 64 - Oct 65

4. Approx 2000 built

5. VR tube added Feb 65

6. 12BZ6 RF Amp

7. Provision for crystal control. (Crystal at 5.455 MHzand 11.1 MHz above desired frequency)

That's all that comes to mind.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

Steve Wedge wrote:
> Hi, Gang -
>

> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?
>
> The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?
>
> 73,
>
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>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12340. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 17:01:16 UTC
From: Joe
Topic: 12321 Message: 12340

Ahhhh! OK...both of mine have the 2 wire flat black plug....It's serial number is: 42699....the other one is buried in my desk in the speaker, so can't get to it easily.

Thanks for the info! (And correction!)

Joe - WA6RKN

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
Subject: Re: [DrakeRadio] AC-4 Supply

> The power cord is correct: the serial number in the 55000's is consistent
> with a 3-wire cord. It probably also has the 120/240 switch on the other
> side - which does make it worth more based on what I've seen them go for.
> Still, $350 is high but I have seen these sell for $250. I sold a nice
> one (totally stock) for $185 not long ago and it went fast.

12341. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 17:06:22 UTC
From: Mike
Topic: 12321 Message: 12341

Wasn't one up on eBay a month ago with a starting price around $425----$450?

Mike wb8vge

Sent from my iPhone

On Mar 4, 2013, at 11:40 AM, "Steve Wedge" <w1es1982@...> wrote:

> The power cord is correct: the serial number in the 55000's is consistent with a 3-wire cord. It probably also has the 120/240 switch on the other side - which does make it worth more based on what I've seen them go for. Still, $350 is high but I have seen these sell for $250. I sold a nice one (totally stock) for $185 not long ago and it went fast.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: Joe
> Sent: Monday, March 04, 2013 11:08 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] AC-4 Supply
>
> WHOA!!! Talk about overpriced. I would be suspicious...that power cord
> (110V) is not stock..at least none of mine have the flat cable, nor a
> grounded plug. Hmmmmmm. Seriously, if he wants to sell it for that price,
> he at least should have it opened up and for everyone to see what the inside
> looks like.
>
> He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!
>
> Joe - WA6RKN
>
> ----- Original Message -----
> From: Chgypsy@...>
> Subject: Re: [DrakeRadio] AC-4 Supply
>
> > Anyone got any comment re this Item on Ebay: 181086635459. The 'asking'
> > seems a tad unrealistic to me. Dave B (onetime GM6WCF
> > Have to agree, I was checking $ for my excess AC4, but that's out of line
> > even with a Heathkit board installed, (which I am assuming it was for that
> > price). Carl wd8nhk
>
> [Non-text portions of this message have been removed]
>

>

[Non-text portions of this message have been removed]

12342. Re: [DrakeRadio] AC-4 Supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 18:05:00 UTC
From: Steve Wedge
Topic: 12321 Message: 12342

One can always ask what one wants for anything. Sometimes, when a seller gets lucky, a buyer comes along who's willing to pay a crazy price. It's the basis of capitalism: someone freely paying an agreed-upon price in exchange for an item. Usually the market takes care of a high price by letting the item languish.

I've sold some Drake gear lately at what I consider to be reasonable prices and they're selling very quickly, which usually indicates the price could come up some. However, I like the fact that I've had folks buy the rigs who are happy with what they've bought.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mike
Sent: Monday, March 04, 2013 12:06 PM
To: DrakeRadio@yahoogroups.com
Cc: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] AC-4 Supply

Wasn't one up on eBay a month ago with a starting price around $425----$450?

Mike wb8vge

Sent from my iPhone

On Mar 4, 2013, at 11:40 AM, "Steve Wedge" w1es1982@...> wrote:

> The power cord is correct: the serial number in the 55000's is consistent with a 3-wire cord. It probably also has the 120/240 switch on the other side - which does make it worth more based on what I've seen them go for. Still, $350 is high but I have seen these sell for $250. I sold a nice one (totally stock) for $185 not long ago and it went fast.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: Joe
> Sent: Monday, March 04, 2013 11:08 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] AC-4 Supply
>
> WHOA!!! Talk about overpriced. I would be suspicious...that power cord

> (110V) is not stock..at least none of mine have the flat cable, nor a
> grounded plug. Hmmmmmm. Seriously, if he wants to sell it for that price,
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> looks like.
>
> He also has an MC-50 desk mic *stand*...no mic...for $65.00. OOF-DAH!
>
> Joe - WA6RKN
>
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> From: Chgypsy@...>
> Subject: Re: [DrakeRadio] AC-4 Supply
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> > even with a Heathkit board installed, (which I am assuming it was for that
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>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12343. TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 20:43:07 UTC
From: slowcountry1
Topic: 12343 Message: 12343

I have finished the work that I had planned on my TR-4Cw. Prior to putting it back in its case, a local knowledgeable ham suggested that I check the values of the cathode and grid resistors. My knowledge of tubes is very limited, I believe this is what he called them.

The schematic that I have is very faint. I see resistors R176, R177, R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks like it wants 68 ohms, very hard to read. I believe these to be the grid resistors.

I see resistors R93, R167 and R121 that connect between pins 3 and 9 on the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to read. I believe these to be the cathode resistors.

First off, can someone verify that I have used grid and cathode resistors as the correct terms; second are these values close enough in tolerance or should I replace them (I would have expected a carbon comp resistor to increase in resistance); third have I measured the correct resistors at the correct pins?

I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.

I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?

Thanks,

Doug

12344. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 21:23:26 UTC
From: Dieter Horst
Topic: 12292 Message: 12344

Hello Vic,

I doubt the dc/dc converter works at all without the core. Hard to say
whether you may have LOCK condition for a short time. Probably not.

But the behaviour you describe could be caused by what Jim indicated:
bad electrolytics.

Anyway, check the 24 V supply. It is a good start.

73, Dieter DL5RDO

Am 03.03.2013 17:54, schrieb g4jss@...:
>
> Garey, Jim, Dieter and others,
> Thank you for your replies and suggestions. It seems the first point
> to look at is the +24v supply. I did
> open it when it came back from repair and later found what looked like
> a ferrite bead on the shack floor - but that could have come from
> anywhere. Just one other question, if the +24v supply is faulty (part
> of the core missing) would the rig briefly work OK for a short
> period (secs) and then go back to unlocked?
>
> Cheers
>
> Vic
>
>

[Non-text portions of this message have been removed]

12345. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 21:43:11 UTC
From: Garey Barrell
Topic: 12343 Message: 12345

Doug -

Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called 'Screen') resistors and are
the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and in this case have no
resistors.

Most resistors are 5% tolerance, which is indicated by the fourth color band on the resistor being
'gold'. If the fourthband is 'silver', the resistor is 10%. This is the tolerance for the value
marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these are 10% resistors.

The 15 ohm resistors are also marked 10%, but Drake tightened that up to 5% since it directly
affects how total current is shared by the three tubes. This means they should be 15 ohms +/- 0.75
ohms. Yours are out of spec even at 10% and should be replaced. It's best if they are all within
5% of each other. The best replacements are the Ohmite OY ceramic composition resistors. Carbon
and metal film resistors don't hold up well under the current surges these resistors are subject to.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
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>
> I see resistors R93, R167 and R121 that connect between pins 3 and 9 on the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to read. I believe these to be the cathode resistors.

>
> First off, can someone verify that I have used grid and cathode resistors as the correct terms; second are these values close enough in tolerance or should I replace them (I would have expected a carbon comp resistor to increase in resistance); third have I measured the correct resistors at the correct pins?
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> I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.
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> I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?
>
> Thanks,
>
> Doug
>
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12346. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 21:47:30 UTC
From: Garey Barrell
Topic: 12343 Message: 12346

Doug -

Missed your last question.... Check R192 for condition and value. This is a 'fuse' for the +250
bus and normally increases in value, DO NOT replace with a larger resistor, 27 ohm, 1/2W carbon
componly.

See attached on earlier message.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> The schematic that I have is very faint. I see resistors R176, R177, R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks like it wants 68 ohms, very hard to read. I believe these to be the grid resistors.
>
> I see resistors R93, R167 and R121 that connect between pins 3 and 9 on the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to read. I believe these to be the cathode resistors.
>
> First off, can someone verify that I have used grid and cathode resistors as the correct terms; second are these values close enough in tolerance or should I replace them (I would have expected a carbon comp resistor to increase in resistance); third have I measured the correct resistors at the correct pins?
>
> I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.
>
> I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?
>
> Thanks,
>
> Doug

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> Yahoo! Groups Links
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12347. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 21:51:31 UTC
From: Barry
Topic: 12343 Message: 12347

Is it important that the cathode resistors be within 5% of 15 ohms, or within 5% of each other reasonably close to 15 ohms?

Barry - N4BUQ

----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: DrakeRadio@yahoogroups.com, dcoffman@...
> Sent: Monday, March 4, 2013 3:43:11 PM
> Subject: Re: [DrakeRadio] TR-4Cw cathode and grid resistors
>
> Doug -
>
> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly
> called 'Screen') resistors and are
> the ones to check. Pin 2 is the Control Grid (commonly called
> 'Grid') and in this case have no
> resistors.
>
> Most resistors are 5% tolerance, which is indicated by the fourth
> color band on the resistor being
> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is
> the tolerance for the value
> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as
> these are 10% resistors.
>
> The 15 ohm resistors are also marked 10%, but Drake tightened that up
> to 5% since it directly
> affects how total current is shared by the three tubes. This means
> they should be 15 ohms +/- 0.75
> ohms. Yours are out of spec even at 10% and should be replaced.
> It's best if they are all within
> 5% of each other. The best replacements are the Ohmite OY ceramic
> composition resistors. Carbon
> and metal film resistors don't hold up well under the current surges
> these resistors are subject to.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:

> > I have finished the work that I had planned on my TR-4Cw. Prior to
> > putting it back in its case, a local knowledgeable ham suggested
> > that I check the values of the cathode and grid resistors. My
> > knowledge of tubes is very limited, I believe this is what he
> > called them.
> >
> > The schematic that I have is very faint. I see resistors R176,
> > R177, R178 that connect between pins 1 and 7 on the 6JB6 PA tubes.
> > The values with the tubes removed is 69.3, 69.4 and 69.2 ohms.
> > The schematic looks like it wants 68 ohms, very hard to read. I
> > believe these to be the grid resistors.
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> > I see resistors R93, R167 and R121 that connect between pins 3 and
> > 9 on the 6JB6 PA tubes. The values with the tubes removed is
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> > resistors.
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> > resistors as the correct terms; second are these values close
> > enough in tolerance or should I replace them (I would have
> > expected a carbon comp resistor to increase in resistance); third
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> > I have replaced the electrolytics with the Hayseed Hams product.
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> > the unit into normal everyday use?
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> > Thanks,
> >
> > Doug
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> [Non-text portions of this message have been removed]
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12348. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 22:02:06 UTC
From: Garey Barrell
Topic: 12343 Message: 12348

Barry -

Relative tolerance is really more important. But these resistors are run pretty hard so power
dissipated goes up rapidly as value increases, giving a snowball effectif values increase too much.
Each resistor canhave 150 mA of current in TUNE and higher still in peaks.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Barry wrote:
> Is it important that the cathode resistors be within 5% of 15 ohms, or within 5% of each other reasonably close to 15 ohms?
>
> Barry - N4BUQ
>
> ----- Original Message -----
>> From: "Garey Barrell" <k4oah@...>
>> To: DrakeRadio@yahoogroups.com, dcoffman@...
>> Sent: Monday, March 4, 2013 3:43:11 PM
>> Subject: Re: [DrakeRadio] TR-4Cw cathode and grid resistors
>>
>> Doug -
>>
>> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly
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>> the ones to check. Pin 2 is the Control Grid (commonly called
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>> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as
>> these are 10% resistors.
>>
>> The 15 ohm resistors are also marked 10%, but Drake tightened that up
>> to 5% since it directly
>> affects how total current is shared by the three tubes. This means
>> they should be 15 ohms +/- 0.75

>> ohms. Yours are out of spec even at 10% and should be replaced.
>> It's best if they are all within
>> 5% of each other. The best replacements are the Ohmite OY ceramic
>> composition resistors. Carbon
>> and metal film resistors don't hold up well under the current surges
>> these resistors are subject to.
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> slowcountry1 wrote:
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>>> resistors as the correct terms; second are these values close
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>>> have I measured the correct resistors at the correct pins?
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>>> against another DVMM so I'm content that the readings are
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>>> Are there any other items that I should check prior to putting
>>> the unit into normal everyday use?
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>>> Thanks,
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>>> Doug

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>> [Non-text portions of this message have been removed]
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12349. Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 22:19:00 UTC
From: slowcountry1
Topic: 12343 Message: 12349

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called 'Screen') resistors and are
> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and in this case have no
> resistors.
>
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> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is the tolerance for the value
> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these are 10% resistors.
>
> The 15 ohm resistors are also marked 10%, but Drake tightened that up to 5% since it directly
> affects how total current is shared by the three tubes. This means they should be 15 ohms +/- 0.75
> ohms. Yours are out of spec even at 10% and should be replaced. It's best if they are all within
> 5% of each other. The best replacements are the Ohmite OY ceramic composition resistors. Carbon
> and metal film resistors don't hold up well under the current surges these resistors are subject to.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> slowcountry1 wrote:
> > I have finished the work that I had planned on my TR-4Cw. Prior to putting it back in its case, a local knowledgeable ham suggested that I check the values of the cathode and grid resistors. My knowledge of tubes is very limited, I believe this is what he called them.
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> > The schematic that I have is very faint. I see resistors R176, R177, R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks like it wants 68 ohms, very hard to read. I believe these to be the grid resistors.

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> > I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.
> >
> > I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?
> >
> > Thanks,
> >
> > Doug
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> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
>

G

Gary,

Now that I have the correct resistor numbers, did I have the correct locations between pins 1 and 7 and 3 and 9 or do I also have the location incorrect?

Thanks again,

Doug

12350. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 22:25:33 UTC
From: Garey Barrell
Topic: 12343 Message: 12350

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called 'Screen') resistors and are
>> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and in this case have no
>> resistors.
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>> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is the tolerance for the value
>> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these are 10% resistors.
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>> The 15 ohm resistors are also marked 10%, but Drake tightened that up to 5% since it directly
>> affects how total current is shared by the three tubes. This means they should be 15 ohms +/- 0.75
>> ohms. Yours are out of spec even at 10% and should be replaced. It's best if they are all within
>> 5% of each other. The best replacements are the Ohmite OY ceramic composition resistors. Carbon
>> and metal film resistors don't hold up well under the current surges these resistors are subject to.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
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>>> The schematic that I have is very faint. I see resistors R176, R177, R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks like it wants 68 ohms, very hard to read. I believe

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>>> I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.
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>>> I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?
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>>> Thanks,
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>>> Doug
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>>
>> [Non-text portions of this message have been removed]
>>
> G
>
> Gary,
>
> Now that I have the correct resistor numbers, did I have the correct locations between pins 1 and 7 and 3 and 9 or do I also have the location incorrect?
>
> Thanks again,
>
> Doug
>
>
Doug-

See attached to previous message. The three resistors in question come together at a terminal strip

tag.

Photo from my Service Supplement CD for the TR-4C.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12351. Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 22:40:06 UTC
From: slowcountry1
Topic: 12343 Message: 12351

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
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> >> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called 'Screen') resistors and are
> >> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and in this case have no
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> >>
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> >>
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> >>
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> >>> Thanks,
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> >>> Doug
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> >>
> >> [Non-text portions of this message have been removed]
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> > G
> >
> > Gary,
> >
> > Now that I have the correct resistor numbers, did I have the correct locations between pins 1 and 7 and 3 and 9 or do I also have the location incorrect?
> >
> > Thanks again,
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> > Doug
> >
> >
> Doug-
>

> See attached to previous message. The three resistors in question come together at a terminal strip
> tag.
>
> Photo from my Service Supplement CD for the TR-4C.
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> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
Gary,

My apologies, I am unable to see an attachment either here or in the email.

R42, R43 and R44 appear to go from either pin 1 or pin 7 to RFC 3 choke off to the side terminating at the chassis and are a value of 68 ohm. Is this the placement of the resistors of concern? Is the placement of the 15 ohm resistors correct across pin 3 and 9? Should these 68 ohm resistors along with the 15 ohm resistors be replaced with the ohmite OY series resistors. Prior to replacement, I want to make sure that I am replacing the correct resistors.

I sincerely apologize for my lack of understanding; in addition my schematic is very hard to read.

12352. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-04 23:26:24 UTC
From: jerry_k9gas
Topic: 12294 Message: 12352

Well here's a new thing. I double checked everything and noticed that after I cleaned everything, the audio is there, matches my Flex, but the meter is not moving. That seems to be the intermittent problem. It may have been coincidence that both were going on, but not the same problem. Sometimes the meter will respond but mostly not. In standby the meter travels right as should, with the rf gain the meter will go to about 40db.
Would this be the agc, though no changes with setting that differently. Also, I do have 1500 filter and selecting that makes no difference as well. All bands are affected. On AM it's a little better, but it only reacts to very strong signals. S9 on my Flex barely moves on the R4C in AM.
Thanks
Jerry K9GAS

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Jerry -
>
> Might be the tube..... Not likely though.... I'd look for a bad solder joint, looking first
> under the 6BA6 you 'fixed' it with yesterday.
>
> Do you have any accessory IF filters? If so, does selecting one of them change the situation? If
> nofilters available, stick a 150 ohm, 2W resistor (any low value) diagonally between the 'hot' legs
> of one of the accessory sockets and see if selecting that filter position 'fixes' things.
>
> If it works again the next time you turn it on, check the Plate, Screen and Cathode voltages on the
> first five tubes and recordthem. Then, when it quits again, recheck those same readings.
>
> If it does NOT work the next time you turn it on, make those same readings anyway and see how they
> compare with the Voltage chart in the manual.
>
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> Glen Allen, VA
>
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> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> jerry_k9gas wrote:
> > I was thinking about that, and it looks like a dismantle job. I thought I had it fixed
> > but after it warms up, receive drops again. I'm going to replace the 6BA6 and see what that does. It's still an inexpensive tube.

> >
> > --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
> >> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
> >>
> >> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
> >>
> >> Good luck...
> >>
> >> Steve Wedge, W1ES/4
> >>
> >>
> >> From: jerry_k9gas
> >> Sent: Sunday, March 03, 2013 10:08 AM
> >> To: DrakeRadio@yahoogroups.com
> >> Subject: [DrakeRadio] Low SSB receive R4C
> >>
> >>
> >>
> >> Hi All,
> >> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS
> >>
> >>
>

12353. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 01:05:05 UTC
From: jerry_k9gas
Topic: 12294 Message: 12353

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> Glen Allen, VA
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> >
> > --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
> >> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
> >>
> >> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
> >>
> >> Good luck...
> >>
> >> Steve Wedge, W1ES/4
> >>
> >>
> >> From: jerry_k9gas
> >> Sent: Sunday, March 03, 2013 10:08 AM
> >> To: DrakeRadio@yahoogroups.com
> >> Subject: [DrakeRadio] Low SSB receive R4C
> >>
> >>
> >>
> >> Hi All,
> >> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS
> >>
> >>
>

12354. Re: [DrakeRadio] R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 02:05:00 UTC
From: Kris Merschrod
Topic: 12324 Message: 12354

Hello Guys, I, too, have an R-4 serial # 0921 that I use with a t-4 Reciter (serial # 173) The number on the VFO can of is 0791. They are nice sounding recvrs. Those were interesting days.

Kris KM2KM

----- Original Message -----
From: Eddy Swynar
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 04, 2013 9:40 AM
Subject: Re: [DrakeRadio] R-4

On 2013-03-04, at 9:36 AM, Steve Wedge wrote:

>
> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?
>
> The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?
>
>

Hi Steve,

You're not even close, I don't think...

The R-4 was the predecessor to the long line of R-4 derivatives that followed. i.e. the "A", "B", & the "C" versions. I understand that it's closest kin is the Drake 2B receiver.

I'm sure that Garey can shed a LOT more light on the subject than I am able to!

BTW, I have an R-4 here---and I LOVE it.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12355. heathkit shop capacitors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 02:17:23 UTC
From: dohafisher
Topic: 12355 Message: 12355

Does anyone know if the heathkit shop is going to open back up? I need a upgrade kit for my AC4>

Thanks
Doyle

12356. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 03:12:11 UTC
From: Garey Barrell
Topic: 12294 Message: 12356

Jerry -

Possibly a bad meter connection?? Do NOT remove the nuts from the meter terminals. There is only
one per bolt and if the bolt is allowed to turn it can break the wire internally. The S-Meter
measures the current differential between V2 Plate and Screen, vs the V4 Plate and Screen current in
abridge. Check the Cathode voltages of both tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

jerry_k9gas wrote:
> Well here's a new thing. I double checked everything and noticed that after I cleaned everything, the audio is there, matches my Flex, but the meter is not moving. That seems to be the intermittent problem. It may have been coincidence that both were going on, but not the same problem. Sometimes the meter will respond but mostly not. In standby the meter travels right as should, with the rf gain the meter will go to about 40db.
> Would this be the agc, though no changes with setting that differently. Also, I do have 1500 filter and selecting that makes no difference as well. All bands are affected. On AM it's a little better, but it only reacts to very strong signals. S9 on my Flex barely moves on the R4C in AM.
> Thanks
> Jerry K9GAS
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Jerry -
>>
>> Might be the tube..... Not likely though.... I'd look for a bad solder joint, looking first
>> under the 6BA6 you 'fixed' it with yesterday.
>>
>> Do you have any accessory IF filters? If so, does selecting one of them change the situation? If
>> nofilters available, stick a 150 ohm, 2W resistor (any low value) diagonally between the 'hot' legs
>> of one of the accessory sockets and see if selecting that filter position 'fixes' things.
>>
>> If it works again the next time you turn it on, check the Plate, Screen and Cathode voltages on the

>> first five tubes and recordthem. Then, when it quits again, recheck those same readings.
>>
>> If it does NOT work the next time you turn it on, make those same readings anyway and see how they
>> compare with the Voltage chart in the manual.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> jerry_k9gas wrote:
>>> I was thinking about that, and it looks like a dismantle job. I thought I had it fixed
>>> but after it warms up, receive drops again. I'm going to replace the 6BA6 and see what that does. It's still an inexpensive tube.
>>>
>>> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
>>>> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
>>>>
>>>> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
>>>>
>>>> Good luck...
>>>>
>>>> Steve Wedge, W1ES/4
>>>>
>>>>
>>>> From: jerry_k9gas
>>>> Sent: Sunday, March 03, 2013 10:08 AM
>>>> To: DrakeRadio@yahoogroups.com
>>>> Subject: [DrakeRadio] Low SSB receive R4C
>>>>
>>>>
>>>>
>>>> Hi All,
>>>> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks,
Jerry K9GAS
>>>>
>>>>
>
>

> ------------------------------------
>
> Yahoo! Groups Links
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12357. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 06:17:09 UTC
From: g4jss@tiscali.co.uk
Topic: 12292 Message: 12357

Hi Dieter
Thank you. Is there a convenient point I can check the 24v without pulling the boards?

Vic

12358. Re: [DrakeRadio] AC-4 Supply in theUK

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 06:29:41 UTC
From: g4jss@tiscali.co.uk
Topic: 12320 Message: 12358

Dave
I have an AC-4 in good working order - in use at the moment. I have two but will probably sell one. Contact me on g4jss@...

73

Viv

12359. Re: [DrakeRadio] heathkit shop capacitors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 12:16:10 UTC
From: Mike
Topic: 12355 Message: 12359

Yup!

We'll be open soon.

Have a new batch of pcbs ordered.

Mike
Wb8vge

The heathkit shop

Sent from my iPhone

On Mar 4, 2013, at 9:17 PM, "dohafisher" <dhfisher@...> wrote:

> Does anyone know if the heathkit shop is going to open back up? I need a upgrade kit for my AC4>
>
> Thanks
> Doyle
>
>

[Non-text portions of this message have been removed]

12360. Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 12:26:08 UTC
From: slowcountry1
Topic: 12343 Message: 12360

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called 'Screen') resistors and are
> >> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and in this case have no
> >> resistors.
> >>
> >> Most resistors are 5% tolerance, which is indicated by the fourth color band on the resistor being
> >> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is the tolerance for the value
> >> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these are 10% resistors.
> >>
> >> The 15 ohm resistors are also marked 10%, but Drake tightened that up to 5% since it directly
> >> affects how total current is shared by the three tubes. This means they should be 15 ohms +/- 0.75
> >> ohms. Yours are out of spec even at 10% and should be replaced. It's best if they are all within
> >> 5% of each other. The best replacements are the Ohmite OY ceramic composition resistors. Carbon
> >> and metal film resistors don't hold up well under the current surges these resistors are subject to.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> I have finished the work that I had planned on my TR-4Cw. Prior to putting it back in its case, a local knowledgeable ham suggested that I check the values of the cathode and grid resistors. My knowledge of tubes is very limited, I believe this is what he called them.
> >>>
> >>> The schematic that I have is very faint. I see resistors R176, R177, R178 that

connect between pins 1 and 7 on the 6JB6 PA tubes. The values with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks like it wants 68 ohms, very hard to read. I believe these to be the grid resistors.
> >>>
> >>> I see resistors R93, R167 and R121 that connect between pins 3 and 9 on the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to read. I believe these to be the cathode resistors.
> >>>
> >>> First off, can someone verify that I have used grid and cathode resistors as the correct terms; second are these values close enough in tolerance or should I replace them (I would have expected a carbon comp resistor to increase in resistance); third have I measured the correct resistors at the correct pins?
> >>>
> >>> I made the measurements with my Fluke 289 and double checked against another DVMM so I'm content that the readings are accurate.
> >>>
> >>> I have replaced the electrolytics with the Hayseed Hams product. Are there any other items that I should check prior to putting the unit into normal everyday use?
> >>>
> >>> Thanks,
> >>>
> >>> Doug
> >>>
> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
> >>>
> >>>
> >>>
> >>>
> >>
> >>
> >> [Non-text portions of this message have been removed]
> >>
> > G
> >
> > Gary,
> >
> > Now that I have the correct resistor numbers, did I have the correct locations between pins 1 and 7 and 3 and 9 or do I also have the location incorrect?
> >
> > Thanks again,
> >
> > Doug
> >
> >
> Doug-
>

> See attached to previous message. The three resistors in question come together at a terminal strip
> tag.
>
> Photo from my Service Supplement CD for the TR-4C.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

Gary,

Thank you for resending the email, the attachment was connected this time. I have ordered the required resistors and will be ordering your CD.

Thanks for all of your help,

Doug

12361. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 14:25:41 UTC
From: Garey Barrell
Topic: 12292 Message: 12361

Vic -

Pin 2 of the Power Supply card or Pin 20 of the VCO card.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

g4jss@... wrote:
> Hi Dieter
> Thank you. Is there a convenient point I can check the 24v without pulling the boards?
>
> Vic
>
>

12362. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 14:52:56 UTC
From: g4jss@tiscali.co.uk
Topic: 12292 Message: 12362

Thanks Garey

12363. Repost of earlier Title "Drake 4 needs home and TLC"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 17:42:37 UTC
From: daveincaol
Topic: 12363 Message: 12363

I've deleted the tags to get rid of the Rich Text.
The result wasn't readable when I reviewed it today.

The son of GM3XIJ (RIP) has asked me to sell on rigs from his Dad's shack.
He had a Drake 4 Station which consists of a T- 4XB S/N 15121G, R-4A S/N 6807B, MN-4 S/N 982, C-4 S/N 327 and a MS-4.
He seems to have had power supply difficulties and has made notes re a 'new power supply' which I don't have. The station appears to have been replaced with a TR-7 and P/S which I also have.

The equipment is not in pristine condition.
The upper horizontal chassis plating is corroded on both RX and TX. All other surfaces are bright and shiny. All tubes appear to be in position. The cases mostly need a refresh and in places possibly a repaint. The facia, dials and knobs are mostly good, the tens, units and second dials on the C-4 clock are discoloured and the clock is probably the 50c/s version.
The exception is the MN-4 which is in very good condition and was likely retained in the shack alongside the new TR-7
I have lots of photos I can upload if someone tells me how or that I can email once I have an address. I can take more from any desired perspective.
If all 5 packages were delivered to the same USA address then the total carriage would be of the order of $170. Separately the carriage would be of the order of $70 each package.
Given the above information and the need for work and restoration I believe they would benefit by being repatriated to where there is an active interest in the equipment.
I don't know how much they might be worth and will have to check any offers against completed sales on FeePay.
I would appreciate any advice and comments.
Thanks
DaveB GM6WCF

12364. Re: [DrakeRadio] Repost of earlier Title "Drake 4 needs home and TLC"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 18:34:40 UTC
From: Joe
Topic: 12363 Message: 12364

Dave...if you upload them to the files section, they should be held for one of the mods to release them....if not, feel free to upload them to me, WA6RKN@..., and I will post them for you. Please make sure the images are all resized to 800x600, give or take, and then zip them up. I can disassemble all compression schemes.

Joe Wolfe - WA6RKN
Moderator

----- Original Message -----
From: "daveincaol" <daveincaol@...>
Subject: [DrakeRadio] Repost of earlier Title "Drake 4 needs home and TLC"

> I've deleted the tags to get rid of the Rich Text.
> The result wasn't readable when I reviewed it today.
>
> The son of GM3XIJ (RIP) has asked me to sell on rigs from his Dad's shack.
> He had a Drake 4 Station which consists of a T- 4XB S/N 15121G, R-4A S/N
> 6807B, MN-4 S/N 982, C-4 S/N 327 and a MS-4.
> He seems to have had power supply difficulties and has made notes re a
> 'new power supply' which I don't have. The station appears to have been
> replaced with a TR-7 and P/S which I also have.
>
> The equipment is not in pristine condition.
> The upper horizontal chassis plating is corroded on both RX and TX. All
> other surfaces are bright and shiny. All tubes appear to be in position.
> The cases mostly need a refresh and in places possibly a repaint. The
> facia, dials and knobs are mostly good, the tens, units and second dials
> on the C-4 clock are discoloured and the clock is probably the 50c/s
> version.
> The exception is the MN-4 which is in very good condition and was likely
> retained in the shack alongside the new TR-7
> I have lots of photos I can upload if someone tells me how or that I can
> email once I have an address. I can take more from any desired
> perspective.
> If all 5 packages were delivered to the same USA address then the total
> carriage would be of the order of $170. Separately the carriage would be
> of the order of $70 each package.
> Given the above information and the need for work and restoration I
> believe they would benefit by being repatriated to where there is an
> active interest in the equipment.
> I don't know how much they might be worth and will have to check any
> offers against completed sales on FeePay.

12365. R-4 Arrived!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 20:45:17 UTC
From: Steve Wedge
Topic: 12365 Message: 12365

All I can say about this rig is, WOW!

The R-4 I bought from the auction site arrived today unmolested by the shipper. The seller had represented "I plugged it in, turned it on and nothing happened." Yep: looked at the fuse and it was blown. Got a replacement into the holder, crossed my fingers and fired it up...

Eureka!

The fuse didn't blow, and I was greeted to a nice blue glow from both windows - meaning that this set has pretty low hours on it. Cosmetically, this radio and its speaker are both 9/10, easily. Not one spot of corrosion on the chassis, the original inspection test tag is still on the power cord (which is still shiny and supple), indicating that it was tested on St. Patty's Day of 1965. There's also an Allied tag on it with "R4 0936" on it, so the original owner probably bought it from Allied.

Cosmetically, it's going to need dust removal (not bad, actually), a new red thing on the dial window and a knob-cleaning.

Electromechanically, the PTO is a little stiff and the PBT slugs aren't moving at all when I turn the PBT, meaning the grease is dried out. Even so, I'm listening to 15CW with it right now and though it needs the RF stages re-peaked, it sounds great!

The PRESELECTOR isn't nearly as touchy as I expected it to be, given that it doesn't have the reduction drive.

The sound is great with no hum at all. Nice, clean tones coming out of the speaker!

I located the INJ jack right next to the premixer on top of the chassis. It will be interesting to hook this up with my T-4XB and see what it will do.

Nice receiver.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12366. Re: [DrakeRadio] R-4 Arrived!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 21:09:11 UTC
From: David Winfree
Topic: 12365 Message: 12366

wow, great score. Does it have the 5kc dial ticks? Are there pix?

On Tue, Mar 5, 2013 at 3:45 PM, Steve Wedge <w1es1982@...> wrote:

> **
>
>
> All I can say about this rig is, WOW!
>
> The R-4 I bought from the auction site arrived today unmolested by the
> shipper. The seller had represented "I plugged it in, turned it on and
> nothing happened." Yep: looked at the fuse and it was blown. Got a
> replacement into the holder, crossed my fingers and fired it up...
>
> Eureka!
>
> The fuse didn't blow, and I was greeted to a nice blue glow from both
> windows - meaning that this set has pretty low hours on it. Cosmetically,
> this radio and its speaker are both 9/10, easily. Not one spot of corrosion
> on the chassis, the original inspection test tag is still on the power cord
> (which is still shiny and supple), indicating that it was tested on St.
> Patty's Day of 1965. There's also an Allied tag on it with "R4 0936" on it,
> so the original owner probably bought it from Allied.
>
> Cosmetically, it's going to need dust removal (not bad, actually), a new
> red thing on the dial window and a knob-cleaning.
>
> Electromechanically, the PTO is a little stiff and the PBT slugs aren't
> moving at all when I turn the PBT, meaning the grease is dried out. Even
> so, I'm listening to 15CW with it right now and though it needs the RF
> stages re-peaked, it sounds great!
>
> The PRESELECTOR isn't nearly as touchy as I expected it to be, given that
> it doesn't have the reduction drive.
>
> The sound is great with no hum at all. Nice, clean tones coming out of the
> speaker!
>
> I located the INJ jack right next to the premixer on top of the chassis.
> It will be interesting to hook this up with my T-4XB and see what it will
> do.
>
> Nice receiver.
>
> Steve Wedge, W1ES/4

>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

12367. Re: Complete C Line Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-05 21:59:43 UTC
From: c a
Topic: 11455 Message: 12367

EQUIPMENT SOLD.

--- In DrakeRadio@yahoogroups.com, "c a" <tec_wrtr@...> wrote:
>
> T4XC - S/N 27704
> R4C - S/N 26371 500HZ and 1.5KHZ filers XTALS added for 160, 30, 17, 12M
> MN-2000 matching network
> AC4 AC Supply
> MS4 Speaker enslosure
> W4 Wattmeter
> Shure 450 mic wired for T4XC
>
> Transmitter, Receiver and AC4 Supply recently refurbished by WA8SAJ Jeff Covelli. Supply had discrete caps and new diodes. Appears original inside. Have documentation to support work done. This is not museum quality gear, but is in excellent shape. Top of MS4 has a couple of scratches. TX and RX have excellent finish and front panels. All blue filters and diffusers replaced and white pointers on knobs repainted. All interconnection cables and manual reprints.
>
> Asking $995 for all but will negotiate on price and could meet on Interstate 81 corridor in VA or elsewhere in Southeast.
>
> Send email direct ni4z at arrl dot net and do not reply on this forum. Will furnish photos and phone numbers. I do not check this Yahoo address frequently so PLEASE email to above if interested.
>
> Thanks,
>
> Condy NI4Z
> Alabama
>

12368. Re: heathkit shop capacitors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 02:30:39 UTC
From: turbo_plumber
Topic: 12355 Message: 12368

whats the cost of the ac4/ac3 kit?
my ac3 needs help
thanks
Doug

--- In DrakeRadio@yahoogroups.com, Mike <prosolar@...> wrote:
>
> Yup!
>
> We'll be open soon.
>
> Have a new batch of pcbs ordered.
>
> Mike
> Wb8vge
>
> The heathkit shop
>
>
> Sent from my iPhone
>
> On Mar 4, 2013, at 9:17 PM, "dohafisher" <dhfisher@...> wrote:
>
> > Does anyone know if the heathkit shop is going to open back up? I need a upgrade kit for my AC4>
> >
> > Thanks
> > Doyle
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

12369. Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 12:56:49 UTC
From: Clive
Topic: 12369 Message: 12369

Hi does anyone on here have any information on a Drake AUX7 Sustitue by G3OKA. I have tried to track down G3OKA but cannot find an email for him. It appears to be a simpler version of the AUK7 (no Crystal facility) with provision of a a matrix of diodes but I need the information on the layout for the diodes. Any help would be most appreciated.

73 Clive GW0PPO

12370. Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 13:23:00 UTC
From: floydsense
Topic: 12369 Message: 12370

Here's a link to my article on the same subject from some time ago:
http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/Homebrew_AUX-7.htm

Included are links to the information sources I used as well as part numbers for the headers. At the bottom of the document you'll find a link to one of W8PU's articles with the details of the diodes required for the bands you want to cover. Note that the original Drake AUX7 modules were made in the same fashion with diodes selecting the frequency ranges needed.

For those who have not used an AUX board: If you construct modules to cover the WARC bands, you can switch to the correct VFO frequency by just using the AUX switch - you won't have to hit the UP and DOWN buttons to get the right range.

73, Floyd - K8AC

--- In DrakeRadio@yahoogroups.com, "Clive" <clivejenner@...> wrote:
>
> Hi does anyone on here have any information on a Drake AUX7 Sustitue by G3OKA. I have tried to track down G3OKA but cannot find an email for him. It appears to be a simpler version of the AUK7 (no Crystal facility) with provision of a a matrix of diodes but I need the information on the layout for the diodes. Any help would be most appreciated.
>
> 73 Clive GW0PPO
>

12371. Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:07:18 UTC
From: floydsense
Topic: 12371 Message: 12371

I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that?

73, K8AC

12372. Re: [DrakeRadio] Re: heathkit shop capacitors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:07:25 UTC
From: Chgypsy@...
Topic: 12355 Message: 12372

turboplumber@... (mailto:turboplumber@...) writes:

whats the cost of the ac4/ac3 kit? my ac3 needs help Doug
Hi Doug,
Last I knew it was $65 and a minimal shipping. But I am sure Mike will
read your request and answer as he can. Carl WD8NHK

[Non-text portions of this message have been removed]

12373. Re: [DrakeRadio] Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:10:49 UTC
From: Chgypsy@...
Topic: 12371 Message: 12373

floyd@... writes:

I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that? 73, K8AC
Not the moderator, but.....
Links will go, files will not. The files are on Yahoo at the DRAKERADIO group.
Carl wd8nhk

[Non-text portions of this message have been removed]

12374. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:30:06 UTC
From: w6mqi
Topic: 12294 Message: 12374

I have a similar problem with my C-line were the audio or receive gain drops to about half from time to time while the rigs are warming up. In order to bring back the gain to normal I have to cycle the transceiver switch on the T4XC, but once everything has warmed up they seem to work just fine. I gave up trying find the problem maybe someday it will finally die and I'll be able to locate the culprit.

Good Luck
Dave, W6MQI

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Jerry -
>
> Possibly a bad meter connection?? Do NOT remove the nuts from the meter terminals. There is only
> one per bolt and if the bolt is allowed to turn it can break the wire internally. The S-Meter
> measures the current differential between V2 Plate and Screen, vs the V4 Plate and Screen current in
> abridge. Check the Cathode voltages of both tubes.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> jerry_k9gas wrote:
> > Well here's a new thing. I double checked everything and noticed that after I cleaned everything, the audio is there, matches my Flex, but the meter is not moving. That seems to be the intermittent problem. It may have been coincidence that both were going on, but not the same problem. Sometimes the meter will respond but mostly not. In standby the meter travels right as should, with the rf gain the meter will go to about 40db.
> > Would this be the agc, though no changes with setting that differently. Also, I do have 1500 filter and selecting that makes no difference as well. All bands are affected. On AM it's a little better, but it only reacts to very strong signals. S9 on my Flex barely moves on the R4C in AM.
> > Thanks
> > Jerry K9GAS
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Jerry -
> >>
> >> Might be the tube..... Not likely though.... I'd look for a bad solder joint,

looking first
> >> under the 6BA6 you 'fixed' it with yesterday.
> >>
> >> Do you have any accessory IF filters? If so, does selecting one of them change the situation? If
> >> nofilters available, stick a 150 ohm, 2W resistor (any low value) diagonally between the 'hot' legs
> >> of one of the accessory sockets and see if selecting that filter position 'fixes' things.
> >>
> >> If it works again the next time you turn it on, check the Plate, Screen and Cathode voltages on the
> >> first five tubes and recordthem. Then, when it quits again, recheck those same readings.
> >>
> >> If it does NOT work the next time you turn it on, make those same readings anyway and see how they
> >> compare with the Voltage chart in the manual.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> jerry_k9gas wrote:
> >>> I was thinking about that, and it looks like a dismantle job. I thought I had it fixed
> >>> but after it warms up, receive drops again. I'm going to replace the 6BA6 and see what that does. It's still an inexpensive tube.
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
> >>>> I worked on one during the past year that had bad connection to the SSB filter. The received signal dropped off about 30 dB (as indicated by the S meter) between CW500 and SSB 2.4, referenced to the CW500 strength. I re-flowed the solder on the filter pins and re-seated the ground connections.
> >>>>
> >>>> That filter isn't easy to reach: it's on the main chassis and not on the rear panel.
> >>>>
> >>>> Good luck...
> >>>>
> >>>> Steve Wedge, W1ES/4
> >>>>
> >>>>
> >>>> From: jerry_k9gas
> >>>> Sent: Sunday, March 03, 2013 10:08 AM
> >>>> To: DrakeRadio@yahoogroups.com
> >>>> Subject: [DrakeRadio] Low SSB receive R4C
> >>>>
> >>>>

> >>>>
> >>>> Hi All,
> >>>> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks, Jerry K9GAS
> >>>>
> >>>>
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
>

12375. looking for a 4 line receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:47:05 UTC
From: yash@aol.com
Topic: 12375 Message: 12375

Looking to buy a 4 line receiver ,will consider all ,cosmetics not important. hopefully operational. please contact me off line.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12376. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 15:48:46 UTC
From: Richard Knoppow
Topic: 12294 Message: 12376

----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 06, 2013 7:30 AM
Subject: [DrakeRadio] Re: Low SSB receive R4C

>I have a similar problem with my C-line were the audio or
>receive gain drops to about half from time to time while
>the rigs are warming up. In order to bring back the gain to
>normal I have to cycle the transceiver switch on the T4XC,
>but once everything has warmed up they seem to work just
>fine. I gave up trying find the problem maybe someday it
>will finally die and I'll be able to locate the culprit.
>
> Good Luck
> Dave, W6MQI

I have occasionally had a problem with an R4B and T4XB
that may be similar. It seems to be the T-R relay in the
transmitter no fully un-muting the receiver. Cleaning the
contacts will help. Another possibility is that one or the
tubes is not making good contact in its socket. Try cleaning
both with contact cleaner. Work the tubes in the socket
with the cleaner. There is, of course, the usual voodoo of
working all the screws since some are used for grounding of
the circuit. This seems to be a universal problem in older
equipment.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12377. TR7 24V power supply board issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 13:12:19 UTC
From: robbydot
Topic: 12377 Message: 12377

Hello Group,
I have a TR 7 thats causing me some issue at the moment, particularly the power supply board. After removing the board and checking it I have 10 V out of the 723 and pass transistors (which is adjustable) and 5 volts out of the 5 V reg connected to the 10 V rail.
I have 10 v feeding the 2 TIP 31's but thats where the problems start. I have no oscillation and hence no 24 volt or -5 volt rail out of the board. The transformer meters out fine and is intact, the I & E core is complete, the tip 31's were replaced as one showed a very low gain compared to the other one, the 24 volt reg was fed with 26 volts and gave 24 volts, the bridge rectifier checks ok and the diode and inductor on the -5 volt rail checks ok ....
I have changed all of the electro's as well, photos before and after to ensure they went back in the same way as well as the same spot...
When I'm checking for the -5 and 24 v rails I am using the second earth, pin 3 on the board, not pin 12 which is for the 5 & 10 volt rails
Another thing is there are 2 68 ohm resistors in parallel with the 15 ohm resistors on the TIP31's... I have disconnected them and reconnected them to see if that makes a difference, it doesn't... I cant see any reference to them in the service manual so I am not sure if they are a factory mod or a cludge...
If anyone has any further idea's or suggestions on what I am missing they would be greatly appreciated...
Thank you Group,
73's
Rob VK3BRS

12378. Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 16:24:10 UTC
From: floydsense
Topic: 12371 Message: 12378

I'm afraid I'm a bit confused, Carl. I'm sitting here on the Yahoo DrakeRadio group entering this message. The Files are there, but I'm unable to upload any new ones. Same with the Links. There should be an option at the top of the links list to add another link, and it's not there. Something has changed.

73, Floyd

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
>
>
> floyd@... writes:
>
> I attempted to upload a file and a link to the group just now and was not
> able to do so. When I tried the file, the message said that the function
> has been disallowed by the group moderator. Why is that? 73, K8AC
> Not the moderator, but.....
> Links will go, files will not. The files are on Yahoo at the DRAKERADIO
> group.
> Carl wd8nhk
>
>
> [Non-text portions of this message have been removed]
>

12379. Re: [DrakeRadio] Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 16:28:44 UTC
From: Garey Barrell
Topic: 12371 Message: 12379

Floyd -

We have had some trouble with X-rated and other files being posted to theFILES section, so I stopped
it! :-)

If you'd like, you can forward to me and I can post it, or if you'd prefer I can open it up for a
while to let you do it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

floydsense wrote:
> I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that?
>
> 73, K8AC
>
>

12380. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 16:32:15 UTC
From: Joe
Topic: 12371 Message: 12380

The files section is closed to user uploads...Someone uploaded porn to the files section, so the privilege is shut off. If anyone has a file(s) to share with the group, send it to the owner or the moderators and we will put it up for you.

Joe Wolfe - WA6RKN
Moderator

----- Original Message -----
From: "floydsense" <floyd@...>
Subject: [DrakeRadio] Re: Question for the group moderator

> I'm afraid I'm a bit confused, Carl. I'm sitting here on the Yahoo
> DrakeRadio group entering this message. The Files are there, but I'm
> unable to upload any new ones. Same with the Links. There should be an
> option at the top of the links list to add another link, and it's not
> there. Something has changed.
>
> 73, Floyd
>
> --- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>>
>>
>>
>> floyd@... writes:
>>
>> I attempted to upload a file and a link to the group just now and was
>> not
>> able to do so. When I tried the file, the message said that the
>> function
>> has been disallowed by the group moderator. Why is that? 73, K8AC
>> Not the moderator, but.....
>> Links will go, files will not. The files are on Yahoo at the DRAKERADIO
>> group.
>> Carl wd8nhk
>>
>>
>> [Non-text portions of this message have been removed]
>>
>
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> ------------------------------------
>
> Yahoo! Groups Links

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>

12381. AC-4 rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 16:34:18 UTC
From: Paul Kraemer
Topic: 12381 Message: 12381

Several weeks ago I decided I wanted a longer cord on one of my AC-4 supplies. Not the power cord, the one to the T4X.
I thought about just making an extension dongle but decided more plug and socket connections was not a good thing, it needed to be a special longer cord. Since someone needed my old standard cord it was an easy decision to share that one and make a longer one for my supply.

Then, I thought I may as well recap the old supply even though it was working fine and change the 2 wire power cord for a 3 wire grounded type. One thing led to another and I decided to replace the old disc ceramic capacitors on the ac line for the proper safety types and add an MOV across the line for transient protection.

I ordered some radial lead electrolytic from Mouser to do a re-can job and started carefully removing the old cans. About the time the new capacitors showed up I started thinking why not just do a layout of two circuit boards that fit over the can capacitor spaces, mount to the same holes, and provided easy access to the existing transformer leads as well as being very well ventilated and easy to install and service.
The end results are shown on this Photobucket link
http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/

A few friends knew what I was doing and the word of mouth receptiveness has been very gratifying. So much so that I have decided to offer my AC-4 rebuild kit as shown, completely assembled, for a very limited time price of $49.95 each plus postage. The target price after that will be $59.95 plus postage.

The kits are constructed of the same industrial grade components we use in our industrial electronic controls, FULLY ASSEMBLED and TESTED and supplied with color coded leads where needed for easy connection to existing, or should I say remaining, Drake components. Necessary mounting hardware is also included as well as a bonus feature of new line rated bypass capacitors and a 130 volt MOV for transient protection. If you need a new 3 wire cord I want to have those available as well. One stop shopping.

Will the kit fit an AC-3? I believe it will. I have not tried it yet but I can see that the two boards mounted side by side will fit the space available. You will have to drill a few 3/32" holes in the AC-3 chassis to line up with the board mounting holes which were positioned for the AC-4 layout.

I am offering these kits as an alternative option to those who appreciate the wide open architecture of the layout, ease of installation, and serviceability should it ever be required. They are covered by the same generous warranty we provide all our industrial customer. Lifetime on

workmanship and 1 years on parts.

All that said, I have sold out my pre production units about three times over and have production quantities on order. Units should be available for shipping the March 22 give or take a day or two.

Thank-you
Paul K0UYA

12382. Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 17:01:45 UTC
From: floydsense
Topic: 12371 Message: 12382

I understand, but I think that there are other solutions that would keep those sections open for all to post. I manage a few Yahoo groups and I usually just terminate the offenders. If someone is getting stuff posted and are not members of the group, maybe the Yahoo folks could sort that out. Anyway, it's more trouble than it's worth to have to go through someone else to post items. I'll just post them elsewhere. Thanks for the explanation.

73, Floyd - K8AC

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Floyd -
>
> We have had some trouble with X-rated and other files being posted to theFILES section, so I stopped
> it! :-)
>
> If you'd like, you can forward to me and I can post it, or if you'd prefer I can open it up for a
> while to let you do it.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> floydsense wrote:
> > I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that?
> >
> > 73, K8AC
> >
> >
>

12383. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 17:16:57 UTC
From: Garey Barrell
Topic: 12371 Message: 12383

Floyd -

I'm sorry you feel that way..... I value your contributions, and I thought friendship.

There doesn't appear to be a way to limit posting to files or links without limiting them to Owner
and Moderators. This has happened a couple of times before, and each time it's someone who joins,
loads their junk, and un-joins. I don't check the files and links every day to see what may have
been posted, and I think you know as well as I do that Yahoo really doesn't have much interest in
modifying their 'product'.

If you have your material ready to upload, let me know and I'll unlock whatever you wish. I usually
only leaveit locked for a day or two, but this just happened a few days ago.

As I'm sure you know, I don't have much tolerance for 'reflectorwars', and want everyone to feel
welcome.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

floydsense wrote:
> I understand, but I think that there are other solutions that would keep those sections open for all to post. I manage a few Yahoo groups and I usually just terminate the offenders. If someone is getting stuff posted and are not members of the group, maybe the Yahoo folks could sort that out. Anyway, it's more trouble than it's worth to have to go through someone else to post items. I'll just post them elsewhere. Thanks for the explanation.
>
> 73, Floyd - K8AC
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Floyd -
>>
>> We have had some trouble with X-rated and other files being posted to theFILES section, so I stopped
>> it! :-)
>>
>> If you'd like, you can forward to me and I can post it, or if you'd prefer I can open it

up for a
>> while to let you do it.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> floydsense wrote:
>>> I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that?
>>>
>>> 73, K8AC
>>>

12384. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 18:09:26 UTC
From: vacuuminded2@...
Topic: 12371 Message: 12384

I agree there are better ways to address this than shutting the files section down from user uploads.

The NUMBER ONE thing you really should do to cut down on spam and subsequently inappropriate file uploads, is to keep the spoof emailers from getting in to start with. How is this possible you ask? Change how people join the group. It is currently set up so that anybody can join with just the click of a mouse, and have full access immediately. This needs to change. Change the group settings so that someone is required to send a note to the owner/moderator at sign-up, (say, requiring a callsign and/or brief description of the equipment they own), which then requires one of you to "accept" their membership. Most other yahoo groups I belong to are set up in this manor.
If that's not enough, you can also set it so that new members are placed on moderation for say, the first three posts. If their first post is smut, you'll catch it and be able to dump them before it reaches all our inboxes. I believe you can also moderate files uploads in this same manor.
Some or all of the above would dramatically reduce the amount of spam we ALL receive, and spoof file postings.

My .02

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Mar 6, 2013, at 11:16 AM, Garey Barrell <k4oah@...> wrote:

> Floyd -
>
> I'm sorry you feel that way..... I value your contributions, and I thought friendship.
>
> There doesn't appear to be a way to limit posting to files or links without limiting them to Owner
> and Moderators. This has happened a couple of times before, and each time it's someone who joins,
> loads their junk, and un-joins. I don't check the files and links every day to see what may have
> been posted, and I think you know as well as I do that Yahoo really doesn't have much interest in
> modifying their 'product'.
>
> If you have your material ready to upload, let me know and I'll unlock whatever you wish. I usually
> only leaveit locked for a day or two, but this just happened a few days ago.
>
> As I'm sure you know, I don't have much tolerance for 'reflectorwars', and want everyone

to feel
> welcome.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> floydsense wrote:
> > I understand, but I think that there are other solutions that would keep those sections open for all to post. I manage a few Yahoo groups and I usually just terminate the offenders. If someone is getting stuff posted and are not members of the group, maybe the Yahoo folks could sort that out. Anyway, it's more trouble than it's worth to have to go through someone else to post items. I'll just post them elsewhere. Thanks for the explanation.
> >
> > 73, Floyd - K8AC
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell wrote:
> >> Floyd -
> >>
> >> We have had some trouble with X-rated and other files being posted to theFILES section, so I stopped
> >> it! :-)
> >>
> >> If you'd like, you can forward to me and I can post it, or if you'd prefer I can open it up for a
> >> while to let you do it.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >>
> >>
> >> floydsense wrote:
> >>> I attempted to upload a file and a link to the group just now and was not able to do so. When I tried the file, the message said that the function has been disallowed by the group moderator. Why is that?
> >>>
> >>> 73, K8AC
> >>>
>
>

[Non-text portions of this message have been removed]

12385. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 18:21:57 UTC
From: Joe
Topic: 12371 Message: 12385

Hi Chris...

Everything you suggested is already in place in DrakeRadios.

As a moderator, the suggestions that file uploads should be allowed, creates far more work for the owners and moderators than you can imagine. Occasional trash file uploads are more common than you could possibly imagine. I would rather be inconvenienced by being asked to post something to the files, than spend all day deleted and chasing down errant members and/or their trash files to a group.

As Garey said, if someone wishes to upload a file or a group of files, we would be more than happy to allow that to happen. Just let one of the moderators know and we will work with you.

Joe Wolfe - WA6RKN
Moderator

----- Original Message -----
From: <vacuuminded2@...>
Subject: Re: [DrakeRadio] Re: Question for the group moderator

>I agree there are better ways to address this than shutting the files
>section down from user uploads.
>
> The NUMBER ONE thing you really should do to cut down on spam and
> subsequently inappropriate file uploads, is to keep the spoof emailers
> from getting in to start with. How is this possible you ask? Change how
> people join the group. It is currently set up so that anybody can join
> with just the click of a mouse, and have full access immediately. This
> needs to change. Change the group settings so that someone is required to
> send a note to the owner/moderator at sign-up, (say, requiring a callsign
> and/or brief description of the equipment they own), which then requires
> one of you to "accept" their membership. Most other yahoo groups I belong
> to are set up in this manor.
> If that's not enough, you can also set it so that new members are placed
> on moderation for say, the first three posts. If their first post is
> smut, you'll catch it and be able to dump them before it reaches all our
> inboxes. I believe you can also moderate files uploads in this same
> manor.
> Some or all of the above would dramatically reduce the amount of spam we
> ALL receive, and spoof file postings.

12386. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 18:33:44 UTC
From: Garey Barrell
Topic: 12371 Message: 12386

Chris -

I have been moderating and using Yahoo groups since the 'beginning'. They have always been set up
to 'joinwith a click' and Yahoo provides for an individual block on Posting. So anyone can joinwithout waiting for 'approval',yet the list is protected against SPAM transmissions. If their
first attempt at a post is junk, it is dumped, and so are they.

Unfortunately, there is no INDIVIDUAL blocks for FILES or LINKS or PHOTOs, only group permissions.

The only line of defense left is individual 'approval' of membership, which frankly is more work for
the moderators for very little return. This is only the second time in several years that I have
suspended upload permissions, and the last time no one even noticed the 3-5 days it was restricted.

73, Garey - K4OAH
Glen Allen, VA
Owner-Moderator

vacuuminded2@... wrote:
> I agree there are better ways to address this than shutting the files section down from user uploads.
>
> The NUMBER ONE thing you really should do to cut down on spam and subsequently inappropriate file uploads, is to keep the spoof emailers from getting in to start with. How is this possible you ask? Change how people join the group. It is currently set up so that anybody can join with just the click of a mouse, and have full access immediately. This needs to change. Change the group settings so that someone is required to send a note to the owner/moderator at sign-up, (say, requiring a callsign and/or brief description of the equipment they own), which then requires one of you to "accept" their membership. Most other yahoo groups I belong to are set up in this manor.
> If that's not enough, you can also set it so that new members are placed on moderation for say, the first three posts. If their first post is smut, you'll catch it and be able to dump them before it reaches all our inboxes. I believe you can also moderate files uploads in this same manor.
> Some or all of the above would dramatically reduce the amount of spam we ALL receive, and spoof file postings.
>
> My .02
>
> Regards,
> Chris kc9ieq

>
>

12387. Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 18:59:30 UTC
From: lgsracer
Topic: 12369 Message: 12387

Don Buska at

http://www.radiolabworks.com/products/index.html
<http://www.radiolabworks.com/products/index.html>

has them:

http://www.radiolabworks.com/products/aux7/aux7.html
<http://www.radiolabworks.com/products/aux7/aux7.html>

[Non-text portions of this message have been removed]

12388. Re: [DrakeRadio] Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 19:08:10 UTC
From: Don Cunningham
Topic: 12369 Message: 12388

Don ONLY has the modules for your existing AUX7 board. The questioner wanted the whole AUX7 replacement board, unless I misread his message. There was one in QST years ago, and FAR Circuits may have a board for that article. I don't know if FAR ships overseas or not.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12389. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 19:18:19 UTC
From: Barry
Topic: 12371 Message: 12389

Strange. I have a Yahoo group that I started about 5 years ago. This kind of thing has never happened to it. The closest I've come to that is someone's email was hacked and some messages from a good member were posted but that was obviously not the member's willful doing.

Maybe it has something to do with the popularity of the group? Anyway, thanks, Garey, for all you do with/for the group. It's all good.

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 6, 2013 12:33:44 PM
> Subject: Re: [DrakeRadio] Re: Question for the group moderator
>
> Chris -
>
> I have been moderating and using Yahoo groups since the 'beginning'.
> They have always been set up
> to 'joinwith a click' and Yahoo provides for an individual block on
> Posting. So anyone can
> joinwithout waiting for 'approval',yet the list is protected against
> SPAM transmissions. If their
> first attempt at a post is junk, it is dumped, and so are they.
>
> Unfortunately, there is no INDIVIDUAL blocks for FILES or LINKS or
> PHOTOs, only group permissions.
>
> The only line of defense left is individual 'approval' of membership,
> which frankly is more work for
> the moderators for very little return. This is only the second time
> in several years that I have
> suspended upload permissions, and the last time no one even noticed
> the 3-5 days it was restricted.
>
> 73, Garey - K4OAH
> Glen Allen, VA
> Owner-Moderator
>
> vacuuminded2@... wrote:
> > I agree there are better ways to address this than shutting the
> > files section down from user uploads.
> >
> > The NUMBER ONE thing you really should do to cut down on spam and

> > subsequently inappropriate file uploads, is to keep the spoof
> > emailers from getting in to start with. How is this possible you
> > ask? Change how people join the group. It is currently set up so
> > that anybody can join with just the click of a mouse, and have
> > full access immediately. This needs to change. Change the group
> > settings so that someone is required to send a note to the
> > owner/moderator at sign-up, (say, requiring a callsign and/or
> > brief description of the equipment they own), which then requires
> > one of you to "accept" their membership. Most other yahoo groups
> > I belong to are set up in this manor.
> > If that's not enough, you can also set it so that new members are
> > placed on moderation for say, the first three posts. If their
> > first post is smut, you'll catch it and be able to dump them
> > before it reaches all our inboxes. I believe you can also
> > moderate files uploads in this same manor.
> > Some or all of the above would dramatically reduce the amount of
> > spam we ALL receive, and spoof file postings.
> >
> > My .02
> >
> > Regards,
> > Chris kc9ieq
> >
> >
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> ------------------------------------
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> Yahoo! Groups Links
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12390. Re: [DrakeRadio] AC-4 rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 19:26:21 UTC
From: Steve Wedge
Topic: 12381 Message: 12390

Love it!

I'll definitely keep this in mind the next time I get an AC-4 that needs service - and with hamfest season coming up, that could be soon :)

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: "Paul Kraemer" <elespe@...>
Sent: Wednesday, March 06, 2013 11:34 AM
To: <DrakeRadio@yahoogroups.com>
Subject: [DrakeRadio] AC-4 rebuild

> Several weeks ago I decided I wanted a longer cord on one of my AC-4
> supplies. Not the power cord, the one to the T4X.
> I thought about just making an extension dongle but decided more plug and
> socket connections was not a good thing, it needed to be a special longer
> cord. Since someone needed my old standard cord it was an easy decision to
> share that one and make a longer one for my supply.
>
> Then, I thought I may as well recap the old supply even though it was
> working fine and change the 2 wire power cord for a 3 wire grounded type.
> One thing led to another and I decided to replace the old disc ceramic
> capacitors on the ac line for the proper safety types and add an MOV
> across
> the line for transient protection.
>
> I ordered some radial lead electrolytic from Mouser to do a re-can job
> and
> started carefully removing the old cans. About the time the new capacitors
> showed up I started thinking why not just do a layout of two circuit
> boards
> that fit over the can capacitor spaces, mount to the same holes, and
> provided easy access to the existing transformer leads as well as being
> very
> well ventilated and easy to install and service.
> The end results are shown on this Photobucket link
> http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
>
> A few friends knew what I was doing and the word of mouth receptiveness
> has

> been very gratifying. So much so that I have decided to offer my AC-4
> rebuild kit as shown, completely assembled, for a very limited time price
> of
> $49.95 each plus postage. The target price after that will be $59.95 plus
> postage.
>
> The kits are constructed of the same industrial grade components we use in
> our industrial electronic controls, FULLY ASSEMBLED and TESTED and
> supplied
> with color coded leads where needed for easy connection to existing, or
> should I say remaining, Drake components. Necessary mounting hardware is
> also included as well as a bonus feature of new line rated bypass
> capacitors
> and a 130 volt MOV for transient protection. If you need a new 3 wire cord
> I
> want to have those available as well. One stop shopping.
>
> Will the kit fit an AC-3? I believe it will. I have not tried it yet but I
> can see that the two boards mounted side by side will fit the space
> available. You will have to drill a few 3/32" holes in the AC-3 chassis to
> line up with the board mounting holes which were positioned for the AC-4
> layout.
>
> I am offering these kits as an alternative option to those who appreciate
> the wide open architecture of the layout, ease of installation, and
> serviceability should it ever be required. They are covered by the same
> generous warranty we provide all our industrial customer. Lifetime on
> workmanship and 1 years on parts.
>
> All that said, I have sold out my pre production units about three times
> over and have production quantities on order. Units should be available
> for
> shipping the March 22 give or take a day or two.
>
> Thank-you
> Paul K0UYA
>
>
>
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>
> Yahoo! Groups Links
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12391. TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 21:23:18 UTC
From: slowcountry1
Topic: 12391 Message: 12391

With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.

I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.

Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.

Thanks,

Doug

12392. Re: [DrakeRadio] TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 21:41:57 UTC
From: Garey Barrell
Topic: 12391 Message: 12392

Doug -

Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
that C143 is leaky, although not likely.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
>
> I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
>
> Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.
>
> Thanks,
>
> Doug
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

12393. Re: [DrakeRadio] TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 21:46:12 UTC
From: Robert Logan
Topic: 12391 Message: 12393

What is your VOX delay set to?

I'm not sure what issue you are describing

Bob, NZ5A

Sent from my iPhone

On Mar 6, 2013, at 3:23 PM, "slowcountry1" <dcoffman@...> wrote:

With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.

I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.

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Thanks,

Doug

[Non-text portions of this message have been removed]

12394. The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 22:45:32 UTC
From: qrper
Topic: 12394 Message: 12394

Gang,

My wife and I talked it over.

One bad apple shouldn't ruin things for everyone.

Late March, early April, I'll have plenty of AC4R kits ready to go. A new batch of pcbs have been ordered and they should be in here within two weeks or so. The same goes for the Heathkit HP23RL

I placed a large order of parts from Mouser and Digikey yesterday.

I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.

Also, and this may or may not fly, I'm working with a company to make a new cover for the AC4. This cover will be designed to increase cooling via two 60mm fans and improved vent holes. It will be made either of aluminum or steel (it's a special type that won't rust!)

It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.

Price? I can't say.

Won't get the quote back for several days.

Right now, is there enough interest?

What's the price point? I don't know...

Anyway, thought I jump in here and let everyone know that will be back.

Mike, wb8vge

The Heathkit Shop

12395. photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 22:52:41 UTC
From: qrper
Topic: 12395 Message: 12395

Gang!

A couple of photos from the shack.

they're listed under:

Drake radios that live in my house

12396. Re: TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 23:06:16 UTC
From: slowcountry1
Topic: 12391 Message: 12396

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage
> onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
> driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage
> immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
> voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
> that C143 is leaky, although not likely.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
> >
> > I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
> >
> > Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.
> >
> > Thanks,
> >
> > Doug
> >
> >
> >
> > ------------------------------------

> >
> > Yahoo! Groups Links
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>
Gary,

Again, you will have to excuse my ignorance. From my schematic, I see C145C as the multiple cap at the front of the radio in front of V18 as 10uf 50V. I have already replaced this with the set from Hayseed Hams. As new caps can be bad, I bridged pin 8 of V19 to ground with a 10uf electrolytic as suggested.

First I need to make sure that I am looking at the correct diode for D5. I see this coming from Pin 6 of V19 on a vertical board next to V19. I stated that I had a +ve voltage of 10.3VDC on the cathode of the diode however; it is actually a -10.3VDC that goes to 0 on a heavy whistle. I really have to make some noise for it to register.

I see C143 being a yellow 200VDC cap on the same side of the board as I see D5. The 3.3K shorting resistor R106 I see on the opposite side of the same board.

I took a picture of the board that I am looking at for reference.

Again, I greatly apologize for all of the remedial questions however; I need to make sure I am looking at the correct components or none of this will fit together. I am very appreciative of your assistance.

Doug

12397. Re: [DrakeRadio] photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-06 23:14:06 UTC
From: Dan Galligan
Topic: 12395 Message: 12397

Very nice station. I hope mine will look half that good, when I get all set up.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Mar 6, 2013, at 14:52, qrper <prosolar@...> wrote:

> Gang!
>
> A couple of photos from the shack.
>
> they're listed under:
>
> Drake radios that live in my house
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
>

[Non-text portions of this message have been removed]

12398. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 00:01:12 UTC
From: W6IDS
Topic: 12394 Message: 12398

The new cover idea sounds like a value-added asset IMHO. Keep the info coming.

Howard W6IDS
Richmond, IN EM79NV

From: qrper
Sent: Wednesday, March 06, 2013 5:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Gang,

My wife and I talked it over.

One bad apple shouldn't ruin things for everyone.

Late March, early April, I'll have plenty of AC4R kits ready to go. A new batch of pcbs have been ordered and they should be in here within two weeks or so. The same goes for the Heathkit HP23RL

I placed a large order of parts from Mouser and Digikey yesterday.

I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.

Also, and this may or may not fly, I'm working with a company to make a new cover for the AC4. This cover will be designed to increase cooling via two 60mm fans and improved vent holes. It will be made either of aluminum or steel (it's a special type that won't rust!)

It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.

<snip>

[Non-text portions of this message have been removed]

12399. Re: The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 00:33:34 UTC
From: slowcountry1
Topic: 12394 Message: 12399

--- In DrakeRadio@yahoogroups.com, "W6IDS" <w6ids@...> wrote:
>
> The new cover idea sounds like a value-added asset IMHO. Keep the info
> coming.
>
> Howard W6IDS
> Richmond, IN EM79NV
>
> From: qrper
> Sent: Wednesday, March 06, 2013 5:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] The Heathkit Shop AC4R rebuild kits
>
>
> Gang,
>
> My wife and I talked it over.
>
> One bad apple shouldn't ruin things for everyone.
>
> Late March, early April, I'll have plenty of AC4R kits ready to go. A new batch of pcbs have been ordered and they should be in here within two weeks or so. The same goes for the Heathkit HP23RL
>
> I placed a large order of parts from Mouser and Digikey yesterday.
>
> I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.
>
> Also, and this may or may not fly, I'm working with a company to make a new cover for the AC4. This cover will be designed to increase cooling via two 60mm fans and improved vent holes. It will be made either of aluminum or steel (it's a special type that won't rust!)
>
> It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.
>
>
> <snip>
>
>
>
> [Non-text portions of this message have been removed]
>
If you've gone to this length, how much more trouble would it be to source a transformer

and offer a complete kit for those that don't have or need an extra power supply? The prices on e-pay may make it a wonderful alternative to a number of hams?

12400. Re: The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 00:35:53 UTC
From: slowcountry1
Topic: 12394 Message: 12400

--- In DrakeRadio@yahoogroups.com, "W6IDS" <w6ids@...> wrote:
>
> The new cover idea sounds like a value-added asset IMHO. Keep the info
> coming.
>
> Howard W6IDS
> Richmond, IN EM79NV
>
> From: qrper
> Sent: Wednesday, March 06, 2013 5:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] The Heathkit Shop AC4R rebuild kits
>
>
> Gang,
>
> My wife and I talked it over.
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> One bad apple shouldn't ruin things for everyone.
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> I placed a large order of parts from Mouser and Digikey yesterday.
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> I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.
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>
> It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.
>
>
> <snip>
>
>
>
> [Non-text portions of this message have been removed]
>
I take it there was a problem with a few customers that caused production to stop? I have

four of the kits and was very excited / grateful to have them.

12401. Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 00:50:53 UTC
From: David Rose
Topic: 12369 Message: 12401

I hope this helps...
Dave KW1V

[Non-text portions of this message have been removed]

12402. Re: [DrakeRadio] AC-4 rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 01:45:44 UTC
From: Brian Green
Topic: 12381 Message: 12402

Sign me up, I need to recap my AC-4.

Brian KF5MDY

On Wed, Mar 6, 2013 at 10:34 AM, Paul Kraemer <elespe@...> wrote:

> Several weeks ago I decided I wanted a longer cord on one of my AC-4
> supplies. Not the power cord, the one to the T4X.
> I thought about just making an extension dongle but decided more plug and
> socket connections was not a good thing, it needed to be a special longer
> cord. Since someone needed my old standard cord it was an easy decision to
> share that one and make a longer one for my supply.
>
> Then, I thought I may as well recap the old supply even though it was
> working fine and change the 2 wire power cord for a 3 wire grounded type.
> One thing led to another and I decided to replace the old disc ceramic
> capacitors on the ac line for the proper safety types and add an MOV across
> the line for transient protection.
>
> I ordered some radial lead electrolytic from Mouser to do a re-can job and
> started carefully removing the old cans. About the time the new capacitors
> showed up I started thinking why not just do a layout of two circuit
> boards
> that fit over the can capacitor spaces, mount to the same holes, and
> provided easy access to the existing transformer leads as well as being
> very
> well ventilated and easy to install and service.
> The end results are shown on this Photobucket link
> http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
>
> A few friends knew what I was doing and the word of mouth receptiveness has
> been very gratifying. So much so that I have decided to offer my AC-4
> rebuild kit as shown, completely assembled, for a very limited time price
> of
> $49.95 each plus postage. The target price after that will be $59.95 plus
> postage.
>
> The kits are constructed of the same industrial grade components we use in
> our industrial electronic controls, FULLY ASSEMBLED and TESTED and supplied
> with color coded leads where needed for easy connection to existing, or
> should I say remaining, Drake components. Necessary mounting hardware is
> also included as well as a bonus feature of new line rated bypass
> capacitors
> and a 130 volt MOV for transient protection. If you need a new 3 wire cord
> I
> want to have those available as well. One stop shopping.

>
> Will the kit fit an AC-3? I believe it will. I have not tried it yet but I
> can see that the two boards mounted side by side will fit the space
> available. You will have to drill a few 3/32" holes in the AC-3 chassis to
> line up with the board mounting holes which were positioned for the AC-4
> layout.
>
> I am offering these kits as an alternative option to those who appreciate
> the wide open architecture of the layout, ease of installation, and
> serviceability should it ever be required. They are covered by the same
> generous warranty we provide all our industrial customer. Lifetime on
> workmanship and 1 years on parts.
>
> All that said, I have sold out my pre production units about three times
> over and have production quantities on order. Units should be available for
> shipping the March 22 give or take a day or two.
>
> Thank-you
> Paul K0UYA
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12403. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 01:47:43 UTC
From: AA8W
Topic: 12394 Message: 12403

Hi Mike,
Will the cover work on an AC-3. Here is a pic of what I did with mine.
73,
Mike AA8W

From: qrper
Sent: Wednesday, March 06, 2013 5:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Gang,

My wife and I talked it over.

One bad apple shouldn't ruin things for everyone.

Late March, early April, I'll have plenty of AC4R kits ready to go. A new batch of pcbs have been ordered and they should be in here within two weeks or so. The same goes for the Heathkit HP23RL

I placed a large order of parts from Mouser and Digikey yesterday.

I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.

Also, and this may or may not fly, I'm working with a company to make a new cover for the AC4. This cover will be designed to increase cooling via two 60mm fans and improved vent holes. It will be made either of aluminum or steel (it's a special type that won't rust!)

It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.

Price? I can't say.

Won't get the quote back for several days.

Right now, is there enough interest?

What's the price point? I don't know...

Anyway, thought I jump in here and let everyone know that will be back.

Mike, wb8vge

The Heathkit Shop

[Non-text portions of this message have been removed]

12404. Re: [DrakeRadio] Re: TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 01:59:49 UTC
From: Garey Barrell
Topic: 12391 Message: 12404

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage
>> onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
>> driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage
>> immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
>> voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
>> that C143 is leaky, although not likely.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
>>>
>>> I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
>>>
>>> Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.
>>>
>>> Thanks,
>>>
>>> Doug
>>>
>>>
>>>

>>> ------------------------------------
>>>
>>> Yahoo! Groups Links
>>>
>>>
>>>
>>>
> Gary,
>
> Again, you will have to excuse my ignorance. From my schematic, I see C145C as the multiple cap at the front of the radio in front of V18 as 10uf 50V. I have already replaced this with the set from Hayseed Hams. As new caps can be bad, I bridged pin 8 of V19 to ground with a 10uf electrolytic as suggested.
>
> First I need to make sure that I am looking at the correct diode for D5. I see this coming from Pin 6 of V19 on a vertical board next to V19. I stated that I had a +ve voltage of 10.3VDC on the cathode of the diode however; it is actually a -10.3VDC that goes to 0 on a heavy whistle. I really have to make some noise for it to register.
>
> I see C143 being a yellow 200VDC cap on the same side of the board as I see D5. The 3.3K shorting resistor R106 I see on the opposite side of the same board.
>
> I took a picture of the board that I am looking at for reference.
>
> Again, I greatly apologize for all of the remedial questions however; I need to make sure I am looking at the correct components or none of this will fit together. I am very appreciative of your assistance.
>
> Doug
>
>
>
Doug -

D5 is on the same board as C143, withit's Cathode lead tied to the terminal at the topof the board,
same as C143.

What is supposed to happen is that audio from the MIC AMP stage is applied to the Grid of V19a (Pin
7 from the wiper of the VOX control. It is ampllified and coupled out of the Plate of V19a (Pin 6)
via C141 to the Anode of D5. The AC signal is rectified by D5, making positive pulses that are
integrated in C143. The Grid of V19b is normally held slightly negative to cut off current through
that section. When a positive voltage is developed across C143, it is enoughto overcome the negative
voltage on the Grid, driving it positive and causing V19b to conduct heavily, pulling the the relay.
R106 discharges C143 so that in the absence of audio the integrated voltage drops to zero,

allowing
the negative bias to again cut off V19b, and releasing the relay.

The ANTI-VOX takes a bit of signal from the receiveraudio and it is rectified by D6 and the resultant _negative_ voltage is integrated in C144 and used to balance the VOX signal. This is to
prevent audio from the speaker tripping the VOX circuit on in receive.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12405. Re: [DrakeRadio] AC-4 rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 02:12:20 UTC
From: Paul Kraemer
Topic: 12381 Message: 12405

Thank-you very much Brian
I will be receiving more boards in two weeks and all other parts are on the way
With our assembly process it takes very little time to stuff and wave solder them. Test and package takes longer.
You are definately down for a set
I am going to get to work on best cost USPS shipping tonight so I can get back to everyone on that. It's always the little insignificant things that slows the process. I could just round up but I want to be as reasonable as I can.
Thank-you again
Paul

----- Original Message -----
From: "Brian Green" <brgreen1973@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 06, 2013 7:45 PM
Subject: Re: [DrakeRadio] AC-4 rebuild

> Sign me up, I need to recap my AC-4.
>
> Brian KF5MDY
>
> On Wed, Mar 6, 2013 at 10:34 AM, Paul Kraemer <elespe@...> wrote:
>
>> Several weeks ago I decided I wanted a longer cord on one of my AC-4
>> supplies. Not the power cord, the one to the T4X.
>> I thought about just making an extension dongle but decided more plug and
>> socket connections was not a good thing, it needed to be a special longer
>> cord. Since someone needed my old standard cord it was an easy decision
>> to
>> share that one and make a longer one for my supply.
>>
>> Then, I thought I may as well recap the old supply even though it was
>> working fine and change the 2 wire power cord for a 3 wire grounded type.
>> One thing led to another and I decided to replace the old disc ceramic
>> capacitors on the ac line for the proper safety types and add an MOV
>> across
>> the line for transient protection.
>>
>> I ordered some radial lead electrolytic from Mouser to do a re-can job
>> and
>> started carefully removing the old cans. About the time the new
>> capacitors
>> showed up I started thinking why not just do a layout of two circuit

>> boards
>> that fit over the can capacitor spaces, mount to the same holes, and
>> provided easy access to the existing transformer leads as well as being
>> very
>> well ventilated and easy to install and service.
>> The end results are shown on this Photobucket link
>> http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
>>
>> A few friends knew what I was doing and the word of mouth receptiveness
>> has
>> been very gratifying. So much so that I have decided to offer my AC-4
>> rebuild kit as shown, completely assembled, for a very limited time price
>> of
>> $49.95 each plus postage. The target price after that will be $59.95 plus
>> postage.
>>
>> The kits are constructed of the same industrial grade components we use
>> in
>> our industrial electronic controls, FULLY ASSEMBLED and TESTED and
>> supplied
>> with color coded leads where needed for easy connection to existing, or
>> should I say remaining, Drake components. Necessary mounting hardware is
>> also included as well as a bonus feature of new line rated bypass
>> capacitors
>> and a 130 volt MOV for transient protection. If you need a new 3 wire
>> cord
>> I
>> want to have those available as well. One stop shopping.
>>
>> Will the kit fit an AC-3? I believe it will. I have not tried it yet but
>> I
>> can see that the two boards mounted side by side will fit the space
>> available. You will have to drill a few 3/32" holes in the AC-3 chassis
>> to
>> line up with the board mounting holes which were positioned for the AC-4
>> layout.
>>
>> I am offering these kits as an alternative option to those who appreciate
>> the wide open architecture of the layout, ease of installation, and
>> serviceability should it ever be required. They are covered by the same
>> generous warranty we provide all our industrial customer. Lifetime on
>> workmanship and 1 years on parts.
>>
>> All that said, I have sold out my pre production units about three times
>> over and have production quantities on order. Units should be available
>> for
>> shipping the March 22 give or take a day or two.
>>
>> Thank-you
>> Paul K0UYA

>>
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>> ------------------------------------
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>> Yahoo! Groups Links
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>
> [Non-text portions of this message have been removed]
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> ------------------------------------
>
> Yahoo! Groups Links
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>
>

12406. Re: [DrakeRadio] photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 03:31:08 UTC
From: Jim Shorney
Topic: 12395 Message: 12406

Nice. I've got an SB-104A in the flock that I picked up a few years ago. I was going to re-sell it until I found out that it was sort of a TR-7 prototype...

73

-Jim
NU0C

On Wed, 06 Mar 2013 22:52:41 -0000, qrper wrote:

>A couple of photos from the shack.
>
>they're listed under:
>
>Drake radios that live in my house

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12407. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 04:18:25 UTC
From: Ethan Blanton
Topic: 12371 Message: 12407

Garey Barrell spake unto us the following wisdom:
> The only line of defense left is individual 'approval' of membership,
> which frankly is more work for the moderators for very little return.
> This is only the second time in several years that I have suspended
> upload permissions, and the last time no one even noticed the 3-5 days
> it was restricted.

Not to drag this out, but let me also add that approval of membership is a major turn-off for technical people. The Internet-savvy world is almost entirely open access, and it's very tempting to just say "whatever, forget it" when presented by a meat barrier. I know there are several yahoo! ham groups I have tried to join in the past that required manual intervention for joining and did not even allow non-members to read the list pre-approval. It's cold comfort that some spam might be stopped when the moderator takes a few days (!) to approve your application, and by then you've forgotten what you wanted to search the list for anyway. ;-)

For whatever it's worth, I think this list has a very high signal to noise ratio, so you guys must be doing something right.

Ethan

12408. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 04:32:28 UTC
From: Bernie
Topic: 12371 Message: 12408

I've been lurking and reading and I applaud the moderators of this list for keeping the spam and porn off it. I belonged to another listserve, where the moderator dropped off and Yahoo would not accept another moderator without her approval, no one could get it. In the meantime it became totally unusable because of the porn. We started a new moderated group. The Heathkit group, this Drake group, the Hallicrafters Group, the Johnson group, and many others on the music side I belong to, all had membership approval gates. If you want the information bad enough you'll use the proper proceedures and go through the membership gate and forward you photos to the moderator for posting...it's that simple. Again...good work moderators...hats off to you for keeping this site safe!!
Bernie in ND

----- Original Message -----
From: Ethan Blanton
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, March 06, 2013 10:18 PM
Subject: Re: [DrakeRadio] Re: Question for the group moderator

Garey Barrell spake unto us the following wisdom:
> The only line of defense left is individual 'approval' of membership,
> which frankly is more work for the moderators for very little return.
> This is only the second time in several years that I have suspended
> upload permissions, and the last time no one even noticed the 3-5 days
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For whatever it's worth, I think this list has a very high signal to noise ratio, so you guys must be doing something right.

Ethan

[Non-text portions of this message have been removed]

12409. Re: TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 04:54:55 UTC
From: slowcountry1
Topic: 12391 Message: 12409

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage
> >> onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
> >> driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage
> >> immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
> >> voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
> >> that C143 is leaky, although not likely.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
> >>>
> >>> I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
> >>>
> >>> Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.
> >>>
> >>> Thanks,
> >>>
> >>> Doug
> >>>

> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
> >>>
> >>>
> >>>
> >>>
> > Gary,
> >
> > Again, you will have to excuse my ignorance. From my schematic, I see C145C as the multiple cap at the front of the radio in front of V18 as 10uf 50V. I have already replaced this with the set from Hayseed Hams. As new caps can be bad, I bridged pin 8 of V19 to ground with a 10uf electrolytic as suggested.
> >
> > First I need to make sure that I am looking at the correct diode for D5. I see this coming from Pin 6 of V19 on a vertical board next to V19. I stated that I had a +ve voltage of 10.3VDC on the cathode of the diode however; it is actually a -10.3VDC that goes to 0 on a heavy whistle. I really have to make some noise for it to register.
> >
> > I see C143 being a yellow 200VDC cap on the same side of the board as I see D5. The 3.3K shorting resistor R106 I see on the opposite side of the same board.
> >
> > I took a picture of the board that I am looking at for reference.
> >
> > Again, I greatly apologize for all of the remedial questions however; I need to make sure I am looking at the correct components or none of this will fit together. I am very appreciative of your assistance.
> >
> > Doug
> >
> >
> >
> Doug -
>
> D5 is on the same board as C143, withit's Cathode lead tied to the terminal at the topof the board,
> same as C143.
>
> What is supposed to happen is that audio from the MIC AMP stage is applied to the Grid of V19a (Pin
> 7 from the wiper of the VOX control. It is ampllified and coupled out of the Plate of V19a (Pin 6)
> via C141 to the Anode of D5. The AC signal is rectified by D5, making positive pulses that are
> integrated in C143. The Grid of V19b is normally held slightly negative to cut off current through
> that section. When a positive voltage is developed across C143, it is enoughto overcome the negative

> voltage on the Grid, driving it positive and causing V19b to conduct heavily, pulling the the relay.
> R106 discharges C143 so that in the absence of audio the integrated voltage drops to zero, allowing
> the negative bias to again cut off V19b, and releasing the relay.
>
> The ANTI-VOX takes a bit of signal from the receiveraudio and it is rectified by D6 and the
> resultant _negative_ voltage is integrated in C144 and used to balance the VOX signal. This is to
> prevent audio from the speaker tripping the VOX circuit on in receive.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

Gary,

Thank you for all of the information. I was looking at the correct diode, cap and resistor. Anode of D5 is -10VDC + or - with no VOX activity and drops to zero when I can actually get the VOX to kick in. I will have to do some investigating and try to figure out what is happening here.

Thanks,

Doug

12410. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 05:39:13 UTC
From: Jim Shorney
Topic: 12371 Message: 12410

On Wed, 6 Mar 2013 23:18:25 -0500, Ethan Blanton wrote:

>The Internet-savvy world is
>almost entirely open access, and it's very tempting to just say
>"whatever, forget it" when presented by a meat barrier.

As a forum operator, group owner, and moderator on several, my philosophy is
that if you don't want to go through a little work to join, then we probably
don't need you anyway. That may not sit right with some people, but oh well...
It's their loss. I don't seem to be short of work these days.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

12411. Re: TR7 24V power supply board issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 06:30:57 UTC
From: robbydot
Topic: 12377 Message: 12411

Hello again Group,

Just a heads up, the TR7 is now working fine... It must have been the low gain transistor because after swapping it out things just started working again... Possibly a dodgy connector joint ?

Thanks group,
73's
Rob.

--- In DrakeRadio@yahoogroups.com, "robbydot" <roberts@...> wrote:
>
> Hello Group,
> I have a TR 7 thats causing me some issue at the moment, particularly the power supply board. After removing the board and checking it I have 10 V out of the 723 and pass transistors (which is adjustable) and 5 volts out of the 5 V reg connected to the 10 V rail.
> I have 10 v feeding the 2 TIP 31's but thats where the problems start. I have no oscillation and hence no 24 volt or -5 volt rail out of the board. The transformer meters out fine and is intact, the I & E core is complete, the tip 31's were replaced as one showed a very low gain compared to the other one, the 24 volt reg was fed with 26 volts and gave 24 volts, the bridge rectifier checks ok and the diode and inductor on the -5 volt rail checks ok ....
> I have changed all of the electro's as well, photos before and after to ensure they went back in the same way as well as the same spot...
> When I'm checking for the -5 and 24 v rails I am using the second earth, pin 3 on the board, not pin 12 which is for the 5 & 10 volt rails
> Another thing is there are 2 68 ohm resistors in parallel with the 15 ohm resistors on the TIP31's... I have disconnected them and reconnected them to see if that makes a difference, it doesn't... I cant see any reference to them in the service manual so I am not sure if they are a factory mod or a cludge...
> If anyone has any further idea's or suggestions on what I am missing they would be greatly appreciated...
> Thank you Group,
> 73's
> Rob VK3BRS
>

12412. Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 08:49:58 UTC
From: Clive Jenner
Topic: 12369 Message: 12412

Hi and thanks for all the replies. I appreciate the effort.

I am actually looking for specific information on the G3OKA board it does not employ diode modules on DIL carriers!

I have uploaded a picture to the Photos section of the site. It's under G0PPO.

I would appreciate any assistance for this board. Diode layout, etcetera!

Thanks again and 73 Clive g0ppo

12413. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 12:50:06 UTC
From: Mike
Topic: 12394 Message: 12413

No,

It will only fit the ac4.

Mike

Sent from my iPhone

On Mar 6, 2013, at 8:47 PM, "AA8W" <aa8w@...> wrote:

> Hi Mike,
> Will the cover work on an AC-3. Here is a pic of what I did with mine.
> 73,
> Mike AA8W
>
> From: qrper
> Sent: Wednesday, March 06, 2013 5:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] The Heathkit Shop AC4R rebuild kits
>
> Gang,
>
> My wife and I talked it over.
>
> One bad apple shouldn't ruin things for everyone.
>
> Late March, early April, I'll have plenty of AC4R kits ready to go. A new batch of pcbs have been ordered and they should be in here within two weeks or so. The same goes for the Heathkit HP23RL
>
> I placed a large order of parts from Mouser and Digikey yesterday.
>
> I plan on making a youtube video of how to build and install the pcb. That's going to be a hoot.
>
> Also, and this may or may not fly, I'm working with a company to make a new cover for the AC4. This cover will be designed to increase cooling via two 60mm fans and improved vent holes. It will be made either of aluminum or steel (it's a special type that won't rust!)
>
> It will come with the fans, hardware and maybe a small circuit board for stealing the ac from the filament string. It maybe just a terminal strip and parts. At lot will depend on the cost of the metal work.
>
> Price? I can't say.
>
> Won't get the quote back for several days.

>
> Right now, is there enough interest?
>
> What's the price point? I don't know...
>
> Anyway, thought I jump in here and let everyone know that will be back.
>
> Mike, wb8vge
>
> The Heathkit Shop
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12414. Re: [DrakeRadio] photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 13:21:09 UTC
From: Mike
Topic: 12395 Message: 12414

Thanks Dan,

That photo is but a fraction of the shack. I'll post some more photos tonight.

Mike

Sent from my iPhone

On Mar 6, 2013, at 6:14 PM, Dan Galligan <w3rxo@...> wrote:

> Very nice station. I hope mine will look half that good, when I get all set up.
>
> Dan
>
>
>

[Non-text portions of this message have been removed]

12415. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 14:09:29 UTC
From: David Winfree
Topic: 12394 Message: 12415

I've rather thought the AC3 NEEDS a cover, especially with the PCB refits,
just for electrical shock safety. Not every ac3/4 is mounted in a speaker,
many, if not most are loose on a shelf. Does the AC4 need better cooling?
this may also depend on mounting in a speaker. Thanks for providing for
this needed product, btw!

On Wed, Mar 6, 2013 at 5:45 PM, qrper <prosolar@gmail.com> wrote:

> **
>
>
> Gang,
>
> My wife and I talked it over.
>
> One bad apple shouldn't ruin things for everyone.
>
> Late March, early April, I'll have plenty of AC4R kits ready to go. A new
> batch of pcbs have been ordered and they should be in here within two weeks
> or so. The same goes for the Heathkit HP23RL
>
> I placed a large order of parts from Mouser and Digikey yesterday.
>
> I plan on making a youtube video of how to build and install the pcb.
> That's going to be a hoot.
>
> Also, and this may or may not fly, I'm working with a company to make a
> new cover for the AC4. This cover will be designed to increase cooling via
> two 60mm fans and improved vent holes. It will be made either of aluminum
> or steel (it's a special type that won't rust!)
>
> It will come with the fans, hardware and maybe a small circuit board for
> stealing the ac from the filament string. It maybe just a terminal strip
> and parts. At lot will depend on the cost of the metal work.
>
> Price? I can't say.
>
> Won't get the quote back for several days.
>
> Right now, is there enough interest?
>
> What's the price point? I don't know...
>
> Anyway, thought I jump in here and let everyone know that will be back.
>

> Mike, wb8vge
>
> The Heathkit Shop
>
>
>

[Non-text portions of this message have been removed]

12416. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:02:05 UTC
From: Mike
Topic: 12394 Message: 12416

A custom cover for the ac3 wouldn't be a bad idea. However the engineering cost, setup fees, and so on would make it prohibiting.

I won't know what the price will be for my proposed ac4 cover for a few days.

Iam thinking the whole shebang can be under $35 for the cover, two fans, all hardware, labels/silkscreen, and components to run the fans.

It will NOT be painted or clear coated.

Mike wb8vge

Sent from my iPhone

On Mar 7, 2013, at 9:09 AM, David Winfree <dmw11038@...> wrote:

> I've rather thought the AC3 NEEDS a cover, especially with the PCB refits,
> just for electrical shock safety. Not every ac3/4 is mounted in a speaker,
> many, if not most are loose on a shelf. Does the AC4 need better cooling?
> this may also depend on mounting in a speaker. Thanks for providing for
> this needed product, btw!
>
> On Wed, Mar 6, 2013 at 5:45 PM, /info/terms/
>

12417. Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:10:53 UTC
From: Paul Kraemer
Topic: 12394 Message: 12417

I agree that the AC3 needs a protective cover over any aftermarket
electronics on top of chassis
I was looking at that last night when asked if my new AC4 rebuild kit would
work with the AC3. Since the boards mount in a horizontal profile on top the
chassis it would be easy for me to offer additional standoffs to mount the
board which would then support a perforated aluminum cover over the boards.
I'd use the same 0.050" thick perforated aluminum stock I use for the S line
replacement speaker grills. Just like Collins did over the bleeder resistors
in the 516F-2.
Problem resolved
Paul K0UYA
----- Original Message -----
From: "David Winfree" <dmw11038@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, March 07, 2013 8:09 AM
Subject: Re: [DrakeRadio] The Heathkit Shop AC4R rebuild kits

> I've rather thought the AC3 NEEDS a cover, especially with the PCB refits,
> just for electrical shock safety. Not every ac3/4 is mounted in a
> speaker,
> many, if not most are loose on a shelf. Does the AC4 need better cooling?
> this may also depend on mounting in a speaker. Thanks for providing for
> this needed product, btw!
>
> On Wed, Mar 6, 2013 at 5:45 PM, qrper <prosolar@...> wrote:
>
>> **
>>
>>
>> Gang,
>>
>> My wife and I talked it over.
>>
>> One bad apple shouldn't ruin things for everyone.
>>
>> Late March, early April, I'll have plenty of AC4R kits ready to go. A new
>> batch of pcbs have been ordered and they should be in here within two
>> weeks
>> or so. The same goes for the Heathkit HP23RL
>>
>> I placed a large order of parts from Mouser and Digikey yesterday.
>>
>> I plan on making a youtube video of how to build and install the pcb.
>> That's going to be a hoot.
>>

>> Also, and this may or may not fly, I'm working with a company to make a
>> new cover for the AC4. This cover will be designed to increase cooling
>> via
>> two 60mm fans and improved vent holes. It will be made either of aluminum
>> or steel (it's a special type that won't rust!)
>>
>> It will come with the fans, hardware and maybe a small circuit board for
>> stealing the ac from the filament string. It maybe just a terminal strip
>> and parts. At lot will depend on the cost of the metal work.
>>
>> Price? I can't say.
>>
>> Won't get the quote back for several days.
>>
>> Right now, is there enough interest?
>>
>> What's the price point? I don't know...
>>
>> Anyway, thought I jump in here and let everyone know that will be back.
>>
>> Mike, wb8vge
>>
>> The Heathkit Shop
>>
>>
>>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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12418. Re: [DrakeRadio] AC-4 Supply in the UK and relisted Series 4 eqpt.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:16:18 UTC
From: David Ball
Topic: 12418 Message: 12418

Hello Keith

I haven't had a lot of luck locating an AC-4 at an affordable price. As far as I can determine after some research the likely selling price of the T-4 in its present condition would be a lot less than the total price for a PSU.
At some time in the future I'll decide how to dispose of the T-4.
One offer I did get was the exchange a PSU for the R-4A plus cash, but I'll give that a miss. A R-4A refurbished to collector condition has the potential to be the most valuable item of the lot. So that one will go on my 'to do' list.
The C-4 has sold to a UK buyer at an agreeable price.
So really all that is left for the moment is the MN-4 and the Speaker.

Thanks for your help

DaveB

----- Original Message -----
From: "Keith Evans" <g3vkw@...>
To: DrakeRadio@yahoogroups.com
Date: Mon, 04 Mar 2013 16:26 -0000
Subject: Re: [DrakeRadio] AC-4 Supply in theUK

>
> Hi Dave
> Are you still in GM Land ?
> If so maybe someone in the GM DX Club might have one, maybe you can put a post on their reflector.
>
> If you were in the South !! I could lend you one.
> 73
> Keith G3VKW
>
> ----- Original Message -----
> From: daveincaol
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, March 04, 2013 1:16 PM
> Subject: [DrakeRadio] AC-4 Supply in theUK
>
> Does anyone in the UK have an AC-3 or 4 power supply for loan or purchase? I know I could buy one off Ebay but I don't intend paying $100 for carriage from the US.
> Once I do get hold of one I will arrange for my 'local' ARC to check out a Tx and Rx that I have been asked to sell on.
> Incidentally I only got one 'bite' when I listed the 5 items as available in an earlier post.
> Anyone got any comment re this Item on Ebay: 181086635459. The 'asking' seems a tad unrealistic to me.

>
> Dave B (onetime GM6WCF)
>
> [Non-text portions of this message have been removed]
>
>
>

12419. TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:42:08 UTC
From: daveincaol
Topic: 12419 Message: 12419

I have a TR-7 and PSU for disposal ex the estate of a bygone ham. (GM3XIJ).
Externally the rig is very clean and has just one scratch on the cover side. The 'internal' condition is presently unknown but I have arranged to take it and several other pieces including a R-4A to my nearest Radio Club in two weeks for testing. After that visit I can post more details.

Any interest or advice let me know.

DaveB (Ex GM6WCF)

12420. Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:51:04 UTC
From: Keith Evans
Topic: 12419 Message: 12420

Hi Dave
Most buyers would want to know the serial number, as there were quite a few changes during production.
73
Keith G3VKW

----- Original Message -----
From: daveincaol
To: DrakeRadio@yahoogroups.com
Sent: Thursday, March 07, 2013 3:42 PM
Subject: [DrakeRadio] TR-7 and PSU for disposal (UK)

I have a TR-7 and PSU for disposal ex the estate of a bygone ham. (GM3XIJ).
Externally the rig is very clean and has just one scratch on the cover side. The 'internal' condition is presently unknown but I have arranged to take it and several other pieces including a R-4A to my nearest Radio Club in two weeks for testing. After that visit I can post more details.

Any interest or advice let me know.

DaveB (Ex GM6WCF)

[Non-text portions of this message have been removed]

12421. AC3 Cookie Sheet cover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 15:57:19 UTC
From: Kris Merschrod
Topic: 12394 Message: 12421

I wish that I had taken a photo of it, but I had an AC3 and felt that it needed a cover so I "borrowed" an aluminum cookie sheet from the kitchen and carefully made a U-shaped cover. I did not have a sheetmetal bend and the main decision was "Tefon in or teflon out?" If I remember well, the screws that hold the bottom on were used to secure the cover. It was a bit tall so there was venting from the top ends.

A little more effort could have been put into it with vent holes - I like the idea of using perfed sheet metal. I would have done that but my wife's inventory was limited! :<)

Kris KM2KM

[Non-text portions of this message have been removed]

12422. Re: [DrakeRadio] AC-4 Supply in the UK and relisted Series 4 eqpt.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 16:05:03 UTC
From: g4jss@tiscali.co.uk
Topic: 12418 Message: 12422

David

Thank you for letting me know - second hand and as no price was ever mentioned for the AC-4 how was it unaffordable?

Vic

12423. Re: [DrakeRadio] AC3 Cookie Sheet cover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 16:44:53 UTC
From: Paul Kraemer
Topic: 12394 Message: 12423

Should be easy to do
McMaster Carr has the perf metal
Inexpensive tall standoffs can be some 10-24 threaded rod, nuts and a small diameter tubing
Doing it that way relaxes the tolerance over trying for a good fit to the chassis
Paul K0UYA

----- Original Message -----
From: "Kris Merschrod" <kris@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, March 07, 2013 9:57 AM
Subject: [DrakeRadio] AC3 Cookie Sheet cover

>I wish that I had taken a photo of it, but I had an AC3 and felt that it
>needed a cover so I "borrowed" an aluminum cookie sheet from the kitchen
>and carefully made a U-shaped cover. I did not have a sheetmetal bend and
>the main decision was "Tefon in or teflon out?" If I remember well, the
>screws that hold the bottom on were used to secure the cover. It was a bit
>tall so there was venting from the top ends.
>
> A little more effort could have been put into it with vent holes - I like
> the idea of using perfed sheet metal. I would have done that but my
> wife's inventory was limited! :<)
>
> Kris KM2KM
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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12424. Re; AC-4R Rebuild Kits.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 17:38:07 UTC
From: Garey Barrell
Topic: 12424 Message: 12424

This is posted at the request of Ron, WB4HFN.

Mike has made several announcements lately about returning to production soon, and so far at least
they will be available ONLY from theHeathkitshop.

****
To everyone on the list looking to purchase the AC4 upgrade
kit.

In the last couple of weeks I am receiving numerous e-mails
daily wanting to purchase that AC4 Upgrade Kit.

I reply that I DO NOT sell that kit, it is ONLY available
from the Heathkit Shop. To those that feel the need to get
rude and nasty, that doesn't help since I DO NOT sell the
kits in the first place.

To Repeat:

I DO NOT SELL THE AC4 UPGRADE KITS.
I DO NOT SELL THE AC4 UPGRADE KITS.
I DO NOT SELL THE AC4 UPGRADE KITS.

I am waiting to purchase kits just like everyone else.
If you cannot wait like everyone else, I suggest you throw
your AC4 in the garbage and buy a new radio.

Ron / WB4HFN

****

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12425. Re: TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 19:16:29 UTC
From: slowcountry1
Topic: 12391 Message: 12425

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage
> >> onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
> >> driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage
> >> immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
> >> voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
> >> that C143 is leaky, although not likely.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
> >>>
> >>> I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
> >>>
> >>> Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.
> >>>
> >>> Thanks,
> >>>
> >>> Doug
> >>>

> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
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> >>>
> > Gary,
> >
> > Again, you will have to excuse my ignorance. From my schematic, I see C145C as the multiple cap at the front of the radio in front of V18 as 10uf 50V. I have already replaced this with the set from Hayseed Hams. As new caps can be bad, I bridged pin 8 of V19 to ground with a 10uf electrolytic as suggested.
> >
> > First I need to make sure that I am looking at the correct diode for D5. I see this coming from Pin 6 of V19 on a vertical board next to V19. I stated that I had a +ve voltage of 10.3VDC on the cathode of the diode however; it is actually a -10.3VDC that goes to 0 on a heavy whistle. I really have to make some noise for it to register.
> >
> > I see C143 being a yellow 200VDC cap on the same side of the board as I see D5. The 3.3K shorting resistor R106 I see on the opposite side of the same board.
> >
> > I took a picture of the board that I am looking at for reference.
> >
> > Again, I greatly apologize for all of the remedial questions however; I need to make sure I am looking at the correct components or none of this will fit together. I am very appreciative of your assistance.
> >
> > Doug
> >
> >
> >
> Doug -
>
> D5 is on the same board as C143, withit's Cathode lead tied to the terminal at the topof the board,
> same as C143.
>
> What is supposed to happen is that audio from the MIC AMP stage is applied to the Grid of V19a (Pin
> 7 from the wiper of the VOX control. It is ampllified and coupled out of the Plate of V19a (Pin 6)
> via C141 to the Anode of D5. The AC signal is rectified by D5, making positive pulses that are
> integrated in C143. The Grid of V19b is normally held slightly negative to cut off current through
> that section. When a positive voltage is developed across C143, it is enoughto overcome the negative

> voltage on the Grid, driving it positive and causing V19b to conduct heavily, pulling the the relay.
> R106 discharges C143 so that in the absence of audio the integrated voltage drops to zero, allowing
> the negative bias to again cut off V19b, and releasing the relay.
>
> The ANTI-VOX takes a bit of signal from the receiveraudio and it is rectified by D6 and the
> resultant _negative_ voltage is integrated in C144 and used to balance the VOX signal. This is to
> prevent audio from the speaker tripping the VOX circuit on in receive.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

Garey,

Today, I bridged the C145C with a 45uf cap instead of a 10uf cap and that produced no results. I looked everything over and I'm not finding a culprit. For smiles and grins, I removed R106 from the circuit however; it did hold the relay in a little bit longer but not much. It actually measured 3.7K instead of 3.3K. I soldered it back in. For some reason, to which I cannot explain, the VOX will now work with normal voice however; the VOX gain has to be turned all the way CW. Any movement off full CW and it will not work.

Doug

12426. tr-4 problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 19:18:01 UTC
From: dlangl01
Topic: 12426 Message: 12426

Today everything was working fine then I got a loud hum but only with the ssb switch in the x position. What should I be looking at?

Dale, K0MER

12427. More photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-07 23:13:57 UTC
From: qrper
Topic: 12427 Message: 12427

Gang,

I promised I'd post a few more photos of the shack.

I even moved some of the junk around!

enjoy,

mike, wb8vge

the heathkit shop

12428. RE: [DrakeRadio] More photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 00:17:42 UTC
From: Rich Arland
Topic: 12427 Message: 12428

Glad to see you aren't a "serious collector", Mike!!

(What no Collins S-Line??)

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Thu, 7 Mar 2013 23:13:57 +0000
Subject: [DrakeRadio] More photos posted

Gang,

I promised I'd post a few more photos of the shack.

I even moved some of the junk around!

enjoy,

mike, wb8vge

the heathkit shop

[Non-text portions of this message have been removed]

12429. Re: [DrakeRadio] Re: Drake AUX7 Sustitue by G3OKA

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 01:23:47 UTC
From: Jim Shorney
Topic: 12369 Message: 12429

You should be able to work it out from an the matrix chart in the AUX-7
instructions and the AUX-7 schematic in the TR-7 service manual.

http://f6fzk.free.fr/DOCUMENTATION/Drake/AUX7.pdf

73,

-Jim
NU0C

On Thu, 07 Mar 2013 08:49:58 +0000, Clive Jenner wrote:

>Hi and thanks for all the replies. I appreciate the effort.
>
>I am actually looking for specific information on the G3OKA board it
>does not employ diode modules on DIL carriers!
>
>I have uploaded a picture to the Photos section of the site. It's under
>G0PPO.
>
>I would appreciate any assistance for this board. Diode layout, etcetera!
>
>Thanks again and 73 Clive g0ppo
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

12430. Re: [DrakeRadio] Re: TR7 24V power supply board issues

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 01:32:32 UTC
From: Jim Shorney
Topic: 12377 Message: 12430

Possibly. That's a common issue with 7-line radios, and affects all the plug-in boards. The female contacts on the plug-in boards can also lose thier "spring" and fail to make good contact, but that seems to be less common.

Another thing to watch for is clearance between components and the back (top) side of the female connectors. The male pins pass completely through the connector shell, and can portrude a small distance out the other side when the board is fully seated. A component that is bent too close can short to the pin. Again this is rate, and is usually caused by somone poking around on the board.

73

-Jim
NU0C

On Thu, 07 Mar 2013 06:30:57 -0000, robbydot wrote:

>Hello again Group,
>
>Just a heads up, the TR7 is now working fine... It must have been the low gain transistor because after swapping it out things just started working again... Possibly a dodgy connector joint ?

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12431. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 03:20:37 UTC
From: Jim Lowman
Topic: 12371 Message: 12431

I agree with Jim. At least with Yahoogroups, the owner/moderator(s) can request a short statement of the reason that the person wants to join. On some of my lists, they still run on the Mailman software. I remember when I was new at administering the lists, the software didn't allow individuals to be moderated - only the entire list. Talk about extra work for the moderator, having to approve each message!
Until someone is in our shoes, it's impossible to convey what we have to contend with.

For example, I have been deluged for a few weeks with bogus membership requests. In some, it's obvious that the e-mail address is bogus; it's just a sequence of random letters that makes no sense.
Others have a totally mismatched e-mail address and user name.

Normally I ask for a callsign, if one is not given along with the membership request or is not in the e-mail address.
Being asked for a callsign may scare some off. Others get downright offended, even though exchanging callsigns is the first thing we do in a QSO.
But if someone can't be bothered to reply with this minimal information, I consider it their loss.

73 de Jim - AD6CW

On 3/6/2013 9:39 PM, Jim Shorney wrote:
> On Wed, 6 Mar 2013 23:18:25 -0500, Ethan Blanton wrote:
>
>> The Internet-savvy world is
>> almost entirely open access, and it's very tempting to just say
>> "whatever, forget it" when presented by a meat barrier.
>
> As a forum operator, group owner, and moderator on several, my philosophy is
> that if you don't want to go through a little work to join, then we probably
> don't need you anyway. That may not sit right with some people, but oh well...
> It's their loss. I don't seem to be short of work these days.
>
> 73
>
> -Jim
> NU0C
>
> --
> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"
>

12432. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 04:00:31 UTC
From: Dan Galligan
Topic: 12371 Message: 12432

Having spent a long time as the moderator, of a very busy BBS, that frequently had very contentious discussions, I have a great deal of respect, for what the moderators go through, to put out a product, as good as this one. One of the other reflectors, to which several of us here, also belong, really raises my hackles, at times, by being too heavy handed in it's moderation. Perfectly good, and informative threads get shut down, because they stray, slightly, from the topic, of the brand of radio, at hand, while others, are allowed to go on, when each is as good as the other.
That is what makes this reflector so good. Perfectly good, but somewhat off-topic threads can usually run their course, without heavy handed policing.
A note of thanks, to those responsible for making this, the great forum, that it is.

Dan

The smallest minority on earth, is the individual. Those who deny individual rights, cannot claim to be defenders of minorities-Ayn Rand

Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

12433. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 04:11:16 UTC
From: Jim Shorney
Topic: 12371 Message: 12433

On Thu, 07 Mar 2013 19:20:37 -0800, Jim Lowman wrote:

>For example, I have been deluged for a few weeks with bogus membership
>requests. In some, it's obvious that the e-mail address is bogus; it's
>just a sequence of random letters that makes no sense.
>Others have a totally mismatched e-mail address and user name.

This is straying off-topic, but one of the nice things about running an SMF forum is that there are some pretty nifty automated defense systems I can install as mod packages. I did so a couple of years ago after the "spring flood" of spammers, and since then have only had to deal with not more than about 5 bogus signups a month. The logs show that the defenses have blocked tens of thousands of malicious attempts, and that's only the ones that get logged (I can get a general idea of the rest on the Project Honeypot page).

Yahoo has a few lessons to learn.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12434. Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 06:27:45 UTC
From: Victor
Topic: 12292 Message: 12434

Hi Garey
Checked the 24v supply from power board and got a steady reading of 23.9 on my DVM.
The situation I have now is (band switch at 20m)when I first switch on the VCO locks and get good sigs and I can switch down to 40, 80 etc and it remains locked and sigs OK. But if I switch to 15m it goes out of lock. Switching back to 20m I now find that has gone out of lock as well. But (still on 20) I switch the rig off and on and it comes back into lock on all the lower bands. Switch up to 15 it all goes out of lock. Totally lost on this.

Cheers

Vic
--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Vic -
>
> Pin 2 of the Power Supply card or Pin 20 of the VCO card.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> g4jss@... wrote:
> > Hi Dieter
> > Thank you. Is there a convenient point I can check the 24v without pulling the boards?
> >
> > Vic
> >
> >
>

12435. RE: [DrakeRadio] More photos posted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 07:39:07 UTC
From: Terrell Hamilton
Topic: 12427 Message: 12435

Mike, I see you've got a few radios there....

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of qrper
Sent: Thursday, March 07, 2013 3:14 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] More photos posted

Gang,

I promised I'd post a few more photos of the shack.

I even moved some of the junk around!

enjoy,

mike, wb8vge

the heathkit shop

[Non-text portions of this message have been removed]

12436. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 15:23:30 UTC
From: Garey Barrell
Topic: 12371 Message: 12436

OK.... It's kinda funny that the only 'complaints' or 'suggestions' about how the list is run
surfaced after ONE member complained he was unable to upload a file! :-)

We must be quite fortunate in operation of the list, because I certainly don't know anything about
running one, and no offense, but I don't think Joe is far ahead of me. We were asked to take over
the list when the originator lost interest and didn't want it to die. The 'other' list is the
opposite of over-moderated, e.g., 'the list isn't working', answer: (if any) 'so? can't help you'.
So I thought it was worth saving and running in parallel, and apparently so did Joe.

This was four or five? years ago, and it's been running pretty good. We are fortunate to have ~975
adults (sorry Jim!) who know how to use a delete key when something offends their sensibilities,
ratherthan complain _to the list_ about my failings.

After several years of 'parallel' operation, i.e., subscribing to both and recommending new users
join the 'other' list too, a few months ago things kinda came to a head for me, but that's another
story. Since the 'blowup', we are averaging about 500 posts/month, and thanks to Joe being in the
Pacific (?) time zone and me being in the Eastern, we have pretty good coverage of giving permission
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merely locked the file and link upload permissions, which can only be done en masse, for a few days
just as a precaution. The first time no-one noticed, but the secondtime a long-time member was
quite irate (out of proportion I believe) and has since unsubscribed. We have had two instances of a
'drive-by' new member uploading garbage to the files and/or links sections, in which case Idump the
trash ('member' included). I don't know that we have any younger members or others who may be

scarred for life by seeing what was uploaded, but if they're on the internet they've at least had it
flashed in front of them a few times.

So I guess all this says is that unless Joe has been doing a lot of housekeeping before I wake up in
the morning, I think we'll continue to do what we've been doing, successfully, unless something else
happens to change my (or Joe's) mind. If it ain't broke...

73, Garey - K4OAH
Glen Allen, VA

Owner/Moderator

12437. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 15:34:47 UTC
From: Wes Bolin
Topic: 12371 Message: 12437

I want to thank you for your dedication to running this list. It (and you) helped through some troubleshooting of my 2B. Keep it up.
Wes

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 8, 2013 9:23 AM
Subject: Re: [DrakeRadio] Re: Question for the group moderator

OK.... It's kinda funny that the only 'complaints' or 'suggestions' about how the list is run
surfaced after ONE member complained he was unable to upload a file! :-)

We must be quite fortunate in operation of the list, because I certainly don't know anything about
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the morning, I think we'll continue to do what we've been doing, successfully, unless something else
happens to change my (or Joe's) mind. If it ain't broke...

73, Garey - K4OAH
Glen Allen, VA

Owner/Moderator

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12438. Re: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 15:50:53 UTC
From: Garey Barrell
Topic: 12292 Message: 12438

Vic -

That's a tough one. There are two VCOs, 0-15 MHz and 15-30 MHz, so your description is that the
lowband VCO locks at power on and stays locked when you go lower in it's range, but if you go above
that the high band VCO does NOT lock, plus once the low band is unlocked it only relocks on power on.

The TR-7 has two 'steering' voltages applied to the VCOs. One is derived from the 24V DC supply and
ranges from 3V for 1.5 MHz and 15V for 14 MHz for the low, and 6V at 21 MHz and 14.5 at 28.5 MHz.
This voltage is used to put the VCO in 'about' the right place to lock, within the capture range of
the actual loop lock voltage. This is allwrapped up inacquisition time, slew rate, loop time
constants, etc., etc., but that's the rough idea of what's supposed to happen.

This is why the 24V supply is critical, because if it's low the entire range is low and the VCOs are
not being put close enough for the loop to acquire lock. However, your 24V supply sounds good, and
the 'idle'(unlocked, free running) VCOfrequencies are 17 and 32 Mhz, VCO alignment is NOT indicated.

Do you have a board extender set available??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Victor wrote:
> Hi Garey
> Checked the 24v supply from power board and got a steady reading of 23.9 on my DVM.
> The situation I have now is (band switch at 20m)when I first switch on the VCO locks and get good sigs and I can switch down to 40, 80 etc and it remains locked and sigs OK. But if I switch to 15m it goes out of lock. Switching back to 20m I now find that has gone out of lock as well. But (still on 20) I switch the rig off and on and it comes back into lock on all the lower bands. Switch up to 15 it all goes out of lock. Totally lost on this.
>
> Cheers
>
> Vic

> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Vic -
>>
>> Pin 2 of the Power Supply card or Pin 20 of the VCO card.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> g4jss@... wrote:
>>> Hi Dieter
>>> Thank you. Is there a convenient point I can check the 24v without pulling the boards?
>>>
>>> Vic
>>>

12439. Re: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 16:28:52 UTC
From: g4jss@tiscali.co.uk
Topic: 12292 Message: 12439

Hi Garey

Thank you.

Yes I do have extender boards.

Here is an update on how things stand. This a.m. I put the band switch to 14mhz and then powered up. All OK on that band (locked) went down to 7mhz and still OK so I left it there for a couple of hours and it remained
locked and good sigs. Went back up to 14mhz after 2 hours and all of the bands went into 'unlock'. So I switched off for a few minutes and
set the bandswitch to 7mhz and powered up again - again locked and OK. After a while moved to 14mhz and all bands went into unlock.
Temperature?

During the period I took some more readings on the power board pins. 23.9v was still present on pin 2 but pin 1 only read
-3.7v instead of -5v. I don't know if that low reading would affect the VCO's.

Thinking about pulling the VCO board and measuring what is
reaching that.

Thanks again, Garey

73

Vic

12440. Re: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 16:49:03 UTC
From: Garey Barrell
Topic: 12292 Message: 12440

Vic -

OK. Once it it locked on a range it seems to be holding. Again, that indicateseither 'coarse'
steering, -or- perhaps bad presets. This agrees with the locking at turn-on, since the coarse
voltage goes past the necessary spot as it ramps up for the lock to grab it.

Since you have the extender board set, remove the DR-7 and plug in the 'jumper card' from the
extender set. This makes it a TR-7 without digital display or general coverage. Then see if you
can switch bands and/or whether the high or low VCO lockson each band. You can tune in the calibrator on the higher bands so you can tell if it is locked or not. This test will eliminate the
offsets. Do you have a service manual?

Yes, -3.7 is 'normal' for the -5V bus. This voltage is ONLY used to bias off the PIN diodesin the
filter selection board, and anything over a volt or so is good.

Please leave previous messages so we know where we have been. Perhaps one of the TR-7 specialists
will wake up and help!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

g4jss@... wrote:
> Hi Garey
>
> Thank you.
>
> Yes I do have extender boards.
>
> Here is an update on how things stand. This a.m. I put the band switch to 14mhz and
> then powered up. All OK on that band (locked) went down to 7mhz and still OK so I left it there for a couple of hours and it remained
> locked and good sigs. Went back up to 14mhz after 2 hours and all of the bands went into 'unlock'. So I switched off for a few minutes and
> set the bandswitch to 7mhz and powered up again - again locked and OK. After a while moved to 14mhz and all bands went into unlock.
> Temperature?

>
> During the period I took some more readings on the power board pins. 23.9v was still present on pin 2 but pin 1 only read
> -3.7v instead of -5v. I don't know if that low reading would affect the VCO's.
>
> Thinking about pulling the VCO board and measuring what is
> reaching that.
>
>

12441. Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 17:28:44 UTC
From: David Ball
Topic: 12419 Message: 12441

Hello Keith and thank you for your response.

The serial No of the TR-7 is 1691 and the model No is 1337. The PSU serial No is 1883.

Where does this place the combo in relation to date and spec?

DaveB

----- Original Message -----
From: "Keith Evans" <g3vkw@...>
To: DrakeRadio@yahoogroups.com
Date: Thu, 07 Mar 2013 15:51 -0000
Subject: Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

>
> Hi Dave
> Most buyers would want to know the serial number, as there were quite a few changes during production.
> 73
> Keith G3VKW
>
> ----- Original Message -----
> From: daveincaol
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, March 07, 2013 3:42 PM
> Subject: [DrakeRadio] TR-7 and PSU for disposal (UK)
>
> I have a TR-7 and PSU for disposal ex the estate of a bygone ham. (GM3XIJ).
> Externally the rig is very clean and has just one scratch on the cover side. The 'internal' condition is presently unknown but I have arranged to take it and several other pieces including a R-4A to my nearest Radio Club in two weeks for testing. After that visit I can post more details.
>
> Any interest or advice let me know.
>
> DaveB (Ex GM6WCF)
>
> [Non-text portions of this message have been removed]
>
>
>

12442. Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 17:33:45 UTC
From: Keith Evans
Topic: 12419 Message: 12442

Hi David,
That is one of the earlier one's
The Later ones had what is known as a Split rear panel,
The later ones also had less birdies because of improved screening.
73
Keith

----- Original Message -----
From: David Ball
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 08, 2013 5:28 PM
Subject: Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Hello Keith and thank you for your response.

The serial No of the TR-7 is 1691 and the model No is 1337. The PSU serial No is 1883.

Where does this place the combo in relation to date and spec?

DaveB

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To: DrakeRadio@yahoogroups.com
Date: Thu, 07 Mar 2013 15:51 -0000
Subject: Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

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> Sent: Thursday, March 07, 2013 3:42 PM
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> DaveB (Ex GM6WCF)
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

12443. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 17:40:34 UTC
From: Robert Logan
Topic: 12371 Message: 12443

Gary, this is the most helpful list I have ever been a poster to. Guys are so knowledgable and so willing to share info and experiences here it boggles my mind. Hardly a day goes by that I don't learn something. As the old philosopher said, maintain....

Bon, NZ5A

Sent from my iPhone

On Mar 8, 2013, at 9:23 AM, Garey Barrell <k4oah@...> wrote:

OK.... It's kinda funny that the only 'complaints' or 'suggestions' about how the list is run
surfaced after ONE member complained he was unable to upload a file! :-)

We must be quite fortunate in operation of the list, because I certainly don't know anything about
running one, and no offense, but I don't think Joe is far ahead of me. We were asked to take over
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opposite of over-moderated, e.g., 'the list isn't working', answer: (if any) 'so? can't help you'.
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adults (sorry Jim!) who know how to use a delete key when something offends their sensibilities,
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Pacific (?) time zone and me being in the Eastern, we have pretty good coverage of giving permission
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just as a precaution. The first time no-one noticed, but the secondtime a long-time member was
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the morning, I think we'll continue to do what we've been doing, successfully, unless something else
happens to change my (or Joe's) mind. If it ain't broke...

73, Garey - K4OAH
Glen Allen, VA

Owner/Moderator

[Non-text portions of this message have been removed]

12444. Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 19:10:21 UTC
From: Chgypsy@...
Topic: 12419 Message: 12444

daveincaol@... writes:

The serial No of the TR-7 is 1691 and the model No is 1337. The PSU serial No is 1883.
Where does this place the combo in relation to date and spec? DaveB

Hi Dave,
I have no idea of what your model NO 1337 is all about.
You can go to _www.w4bfn.com_ (http://www.w4bfn.com) and the Drake spot for what is a fantastic amount of Drake information including a serial number vs build date index.
Perchance your units still have the cardboard wired tag on them it will give the serial number and build date.
Another party has already advise that you have early units and I agree.
Carl WD8NHK

[Non-text portions of this message have been removed]

12445. Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 19:17:18 UTC
From: Keith Evans
Topic: 12419 Message: 12445

Hi Carl
The model number is the number Drake gave the TR7, I guess for their catalog.
I think this started with the 7 line as I don't think I have any for the 4 line gear.
I guess others on here will no doubt be able to refine my answer.
73
Keith G3VKW

----- Original Message -----
From: Chgypsy@...
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 08, 2013 7:10 PM
Subject: Re: [DrakeRadio] TR-7 and PSU for disposal (UK)

daveincaol@... writes:

The serial No of the TR-7 is 1691 and the model No is 1337. The PSU serial
No is 1883.
Where does this place the combo in relation to date and spec? DaveB

Hi Dave,
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give the serial number and build date.
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Carl WD8NHK

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12446. Re: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 20:02:12 UTC
From: g4jss@tiscali.co.uk
Topic: 12292 Message: 12446

Hi Garey
Both emails received OK. Will try removing the DR7 and see how that goes. Thank you also for the attachment re PLL

Will see how
it goes

73

Vic

12447. problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 20:57:22 UTC
From: dalepavlicek
Topic: 12447 Message: 12447

went thru the t4x ,all the usual contact cleaning,pot cleaning,checked tubes etc. Put the rig on dummy load and went to set the bias,per the manual. When I go to tune, the ac-4 makes a little differant sound , the meter shows no bias indication at all and with in about 10 seconds the pilot lights turn off. turn the switch back to SSB and in a few seconds the pilot lights come back on . I checked the ac-4 ,all voltages are correct including the bias voltages. any ideas where to start? never saw any smoke ,at least not yet.
dale wt4t

12448. Re: [DrakeRadio] problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 21:22:49 UTC
From: Garey Barrell
Topic: 12447 Message: 12448

Dale -

Weird... I could understand if there was a short between the PA Cathodes and R36 (shorted C60?) but
that would blow the 'correct' fuse in the AC-4, not turn off the lights! and the short would be
present whether the MODE switch was in SSB or TUNE. The lights are just in series across the
filament line, but if that were shorting it would blow the 8A fuse under the chassis. It wouldn't
'come back on'.

Check the wiring for the lights, they are prone to swivel around and perhaps short to the chassis.
If nothing there, I'd pull the PA tubes and see what happens. Monitor the filament line when you
switch from SSB to TUNE.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dalepavlicek wrote:
> went thru the t4x ,all the usual contact cleaning,pot cleaning,checked tubes etc. Put the rig on dummy load and went to set the bias,per the manual. When I go to tune, the ac-4
> makes a little differant sound , the meter shows no bias indication at all and with in about 10 seconds the pilot lights turn off. turn the switch back to SSB and in a few seconds the pilot lights come back on . I checked the ac-4 ,all voltages are correct including the bias voltages. any ideas where to start? never saw any smoke ,at least not yet.
> dale wt4t
>
>
>
> ------------------------------------
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> Yahoo! Groups Links
>
>
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12449. AC-4 rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 21:55:14 UTC
From: Paul Kraemer
Topic: 12381 Message: 12449

AC-4 Upgrade Kits

Shipping costs:

After evaluating several options USPS and FedEx Home Delivery the USPS is still lowest cost for small lightweight packages even after insurance is added.

The USPS insured parcel post shipping adders within the 48 states are:

One kit $8

Two or three kits $12

Four or more kits $15

Out of country, please ask giving specific destination details.

In addition to your physical address it is always a good idea to include a phone number. If I use FedEx it is required I have a phone contact for the recipient.

How to pay:

I will email an invoice to you

Please make payment to Paul Kraemer or Electronic Specialties. The government doesn't care which way I do my accounting---so long as I do it.

Speaking of government, Iowa customers please add 7% for the IA sales tax.

Payment may be in form of Check, money order, or PayPal. For PayPal please add 3% of the total invoice amount to cover their fees. My PayPal is same as my email elespe@...

My mailing address:

Paul Kraemer

207 N. Morgan St

Fairfield, IA 52556

Shipment will be made after payment is received and verified.

At this time we are on schedule to begin shipping March 25, 2013

I want to personally thank you for favoring us with your purchase. We strive to make every customer a happy customer

Paul Kraemer K0UYA

Electronic Specialties

12450. Re: [DrakeRadio] problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 22:05:38 UTC
From: yash@aol.com
Topic: 12447 Message: 12450

Garey
I must be losing it. first I pulled the 2 pilot lights out and looked them over,I had 2 led blue LED lights in place of the 47 bulbs. put those back to 47"s and reinstalled the sockets. fired it up and lights are no longer a problem. I had a extra meter and subbed it for the original,just in case that was a problem, same thing no bias indication ,no meter movement . Did check the filament line stays steady at 7.3 volts in either tune or SSB. I believe the pilot light thing was a bulb problem, maybe on was a flasher? so the problem is no bias in tune.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Fri, Mar 8, 2013 4:22 pm
Subject: Re: [DrakeRadio] problem with t4x

Dale -

Weird... I could understand if there was a short between the PA Cathodes and R36 (shorted C60?) but
that would blow the 'correct' fuse in the AC-4, not turn off the lights! and the short would be
present whether the MODE switch was in SSB or TUNE. The lights are just in series across the
filament line, but if that were shorting it would blow the 8A fuse under the chassis. It wouldn't
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73, Garey - K4OAH
Glen Allen, VA

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> dale wt4t
>
>
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> ---
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12451. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 22:20:47 UTC
From: Jim Lowman
Topic: 12371 Message: 12451

Not sure which "Jim" you were addressing here, Garey. :-)

73 de Jim - AD6CW

On 3/8/2013 7:23 AM, Garey Barrell wrote:
> OK.... It's kinda funny that the only 'complaints' or 'suggestions' about how the list is run
> surfaced after ONE member complained he was unable to upload a file! :-)
>
> We must be quite fortunate in operation of the list, because I certainly don't know anything about
> running one, and no offense, but I don't think Joe is far ahead of me. We were asked to take over
> the list when the originator lost interest and didn't want it to die. The 'other' list is the
> opposite of over-moderated, e.g., 'the list isn't working', answer: (if any) 'so? can't help you'.
> So I thought it was worth saving and running in parallel, and apparently so did Joe.
>
> This was four or five? years ago, and it's been running pretty good. We are fortunate to have ~975
> adults (sorry Jim!) who know how to use a delete key when something offends their sensibilities,
> ratherthan complain _to the list_ about my failings.
>
> After several years of 'parallel' operation, i.e., subscribing to both and recommending new users
> join the 'other' list too, a few months ago things kinda came to a head for me, but that's another
> story. Since the 'blowup', we are averaging about 500 posts/month, and thanks to Joe being in the
> Pacific (?) time zone and me being in the Eastern, we have pretty good coverage of giving permission
> to new postersand cleaning up little messes.
>
> I can only think of about a half dozen times that a bogus message with link has gotten past us, and
> they are the ones that are posted under an existing members call, WITHOUT THEIR KNOWLEDGE, so
> requiring some sort of 'password' doesn't seem too cost/time-effective. In both those instances I
> merely locked the file and link upload permissions, which can only be done en masse, for a few days
> just as a precaution. The first time no-one noticed, but the secondtime a long-time member was

> quite irate (out of proportion I believe) and has since unsubscribed. We have had two instances of a
> 'drive-by' new member uploading garbage to the files and/or links sections, in which case Idump the
> trash ('member' included). I don't know that we have any younger members or others who may be
> scarred for life by seeing what was uploaded, but if they're on the internet they've at least had it
> flashed in front of them a few times.
>
> So I guess all this says is that unless Joe has been doing a lot of housekeeping before I wake up in
> the morning, I think we'll continue to do what we've been doing, successfully, unless something else
> happens to change my (or Joe's) mind. If it ain't broke...
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Owner/Moderator
>

12452. Re: [DrakeRadio] problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 22:26:27 UTC
From: Garey Barrell
Topic: 12447 Message: 12452

Dale -

Thaaattt's better. :-)

Simple fact.... "It takes two wires to ring a doorbell!" This is a statement I heard MANY years
ago from along gone old timer. Essentially it means you have to have a 'complete' circuit for
something to happen.

So IF we have Plate voltage on the PA tube plate caps, and Screen voltage on the screen pins and
ground the Cathode, current WILL flow, regardless of anything else in the transmitter. Make that
LOTS of current. Now if we apply a negative voltage to the Grid, we can control that current flow,
regardless of anything else.

Quick check, if the T-4X has been modified for use with the TC-2/6 transmitting converters, it will
have three additional RCA jacks on the back panel. One taps off a bit of RF on 14 MHz. The other
two are used to interrupt Screen voltage between the power socket and the feedthrough cap on the
underchassis PA shield wall. This calls for a jumper cable between those two jacks, or some sort of
shorting link across them inside the chassis,

No TC jacks? Check the voltages ON the PA tube pins. If the Cathode reads 130+ or so, they ain't
grounded. The ground path is through R32, 33, then through RFC2, C60 to R36, then to a relay contact
that should ground this point when the relay is closed. The Cathode voltages should go to a fraction
of a volt, and idle current will flow.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Garey
> I must be losing it. first I pulled the 2 pilot lights out and looked them over,I had 2 led blue LED lights in place of the 47 bulbs. put those back to 47"s and reinstalled the

sockets. fired it up and lights are no longer a problem. I had a extra meter and subbed it for the original,just in case that was a problem, same thing no bias indication ,no meter movement . Did check the filament line stays steady at 7.3 volts in either tune or SSB. I believe the pilot light thing was a bulb problem, maybe on was a flasher? so the problem is no bias in tune.
> dale wt4t
>
>
>
> -----Original Message-----
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Fri, Mar 8, 2013 4:22 pm
> Subject: Re: [DrakeRadio] problem with t4x
>
>
>
>
>
> Dale -
>
> Weird... I could understand if there was a short between the PA Cathodes and R36 (shorted C60?) but
> that would blow the 'correct' fuse in the AC-4, not turn off the lights! and the short would be
> present whether the MODE switch was in SSB or TUNE. The lights are just in series across the
> filament line, but if that were shorting it would blow the 8A fuse under the chassis. It wouldn't
> 'come back on'.
>
> Check the wiring for the lights, they are prone to swivel around and perhaps short to the chassis.
> If nothing there, I'd pull the PA tubes and see what happens. Monitor the filament line when you
> switch from SSB to TUNE.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>;
>
> dalepavlicek wrote:
>> went thru the t4x ,all the usual contact cleaning,pot cleaning,checked tubes etc. Put the rig on dummy load and went to set the bias,per the manual. When I go to tune, the ac-4
>> makes a little differant sound , the meter shows no bias indication at all and with in about 10 seconds the pilot lights turn off. turn the switch back to SSB and in a few seconds the pilot lights come back on . I checked the ac-4 ,all voltages are correct including the bias voltages. any ideas where to start? never saw any smoke ,at least not

yet.
>> dale wt4t
>>
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>> ------------------------------------
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>> Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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12453. R4-A for Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 22:34:36 UTC
From: daveincaol
Topic: 12453 Message: 12453

I've uploaded several photos of the R4-A I want to refurbish. The upper copper plate is the main problem and because I don't want to dismantle too far perhaps the best thing I can do is copy K9SUL's approach and clean and copper paint the corroded surfaces, then follow up with waterslide transfers to replace the labelling.
I could grit blast the outer covers and repaint with 'authentic' enamel. I've been promising myself I will build a Grit blast cabinet 'one of these days' - this could be the time.
Comments and observations much appreciated.

DaveB (Onetime GM6WCF)

12454. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 22:39:59 UTC
From: Garey Barrell
Topic: 12371 Message: 12454

Jim -

Sorry, I should have been more specific. The 'other' Jim knows who he is!!! :-) I think we each
have serious questions about the other! :-)

He's been pretty quiet lately, I must not have offended him.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Lowman wrote:
> Not sure which "Jim" you were addressing here, Garey. :-)
>
> 73 de Jim - AD6CW
>
> On 3/8/2013 7:23 AM, Garey Barrell wrote:
>> We are fortunate to have ~975 adults (sorry Jim!) who know how to use a delete key when something offends their sensibilities,
>> rather than complain _to the list_ about my failings.
>>

12455. readings on the t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-08 23:14:55 UTC
From: yash@aol.com
Topic: 12455 Message: 12455

Garey
No extra jacks on this rig. measured the voltages on the 2 finals first with the switch in SSB. second with the switch in TUNE.

both tubes in SSB. both tubes in tune

pin 1-274 267
pin 2-77 0
pin 3-148 0
pin 4-0 0
pin 5-0 0
pin 6-77 77
pin 7-273 266
pin 8-0 0
pin 9-148 0

any ideas, I need to get a readable schematic, mine is too hard to read.

thanks
dale wt4t

[Non-text portions of this message have been removed]

12456. Re: [DrakeRadio] R4-A for Restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 02:50:36 UTC
From: Steve Wedge
Topic: 12453 Message: 12456

Dave -

Unless you're wanting to restore a family heirloom or otherwise bring back a radio that's personally important to you, I'd hold off.

With the great international communication that we have nowadays, we should be able to get you what you want for a fair price - the only sticking point being the shipping charges. The copper plating on all the pre-C rigs can only be restored a certain amount. You really must find an example with no corrosion, or, at least, very little corrosion.

They're out there. One must be patient.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: daveincaol
Sent: Friday, March 08, 2013 5:34 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] R4-A for Restoration

I've uploaded several photos of the R4-A I want to refurbish. The upper copper plate is the main problem and because I don't want to dismantle too far perhaps the best thing I can do is copy K9SUL's approach and clean and copper paint the corroded surfaces, then follow up with waterslide transfers to replace the labelling.
I could grit blast the outer covers and repaint with 'authentic' enamel. I've been promising myself I will build a Grit blast cabinet 'one of these days' - this could be the time.
Comments and observations much appreciated.

DaveB (Onetime GM6WCF)

[Non-text portions of this message have been removed]

12457. Re: [DrakeRadio] readings on the t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 03:34:52 UTC
From: Garey Barrell
Topic: 12455 Message: 12457

Dale -

If you had my CDs you'd have all the schematic versions, clear andeasy to read. Also where to find
all those peskyparts. Take it to your local FedEx Office and print it out 2' x 3' if you like. See
attached.

The Pin 9s are where the two 15 ohm Cathode resistors come together, then through the RFC2 to C20
and out. The Cathode voltage is going to 0, so the stage IS keyed and current is flowing, except
the BIAS voltage is too high. Bring it down into the -60V range while watching the PLATE meter. You
should hear the AC-4 groan a little, and if still no current showing on the meter, then the meter is
being shorted out.

Pins 2 and 6 are all grid pins are all tied together with the brass strap and should be NEGATIVE 65
V or so. You show one going to 0 volts in TUNE, transcription error or bad solder or..... All four
pins should stay the same voltage.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

yash@... wrote:
> Garey
> No extra jacks on this rig. measured the voltages on the 2 finals first with the switch in SSB. second with the switch in TUNE.
>
> both tubes in SSB. both tubes in tune
>
>
>
>
> pin 1-274 267
> pin 2-77 0
> pin 3-148 0
> pin 4-0 0
> pin 5-0 0

```
> pin 6-77 77
> pin 7-273 266
> pin 8-0 0
> pin 9-148 0
>
>
```

[Non-text portions of this message have been removed]

12458. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 05:16:17 UTC
From: Jim Shorney
Topic: 12371 Message: 12458

Naturally, it could not have been me...

73

Another Jim
NU0C

On Fri, 08 Mar 2013 17:39:59 -0500, Garey Barrell wrote:

>Jim -
>
>Sorry, I should have been more specific. The 'other' Jim knows who he is!!! :-) I think we each
>have serious questions about the other! :-)
>
>He's been pretty quiet lately, I must not have offended him.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Lowman wrote:
>> Not sure which "Jim" you were addressing here, Garey. :-)
>>
>> 73 de Jim - AD6CW
>>
>> On 3/8/2013 7:23 AM, Garey Barrell wrote:
>>> We are fortunate to have ~975 adults (sorry Jim!) who know how to use a delete key when something offends their sensibilities,
>>> rather than complain _to the list_ about my failings.
>>>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12459. Help Potentiometer of TR4-C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 09:53:59 UTC
From: Radio Vintage
Topic: 12459 Message: 12459

Good Morning to All
Can you help me, how can I repair and / or find a way to replace the potentiometer of TR4-C (RCVR-gain/Power / RF)
Thanks for the advice
Frank

[Non-text portions of this message have been removed]

12460. Re: [DrakeRadio] problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 12:22:02 UTC
From: Robert Nohren
Topic: 12447 Message: 12460

I understand, when the ac-4 goes, you're better off replacing it with a new replacement kit. I did, it wasn't much
money and it's relatively easy to do if you're at all handy.

Bob N4IBK
On Mar 8, 2013, at 3:57 PM, dalepavlicek wrote:

> went thru the t4x ,all the usual contact cleaning,pot cleaning,checked tubes etc. Put the rig on dummy load and went to set the bias,per the manual. When I go to tune, the ac-4
> makes a little differant sound , the meter shows no bias indication at all and with in about 10 seconds the pilot lights turn off. turn the switch back to SSB and in a few seconds the pilot lights come back on . I checked the ac-4 ,all voltages are correct including the bias voltages. any ideas where to start? never saw any smoke ,at least not yet.
> dale wt4t
>
>

[Non-text portions of this message have been removed]

12461. Re: [DrakeRadio] problem with t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 12:25:28 UTC
From: yash@aol.com
Topic: 12447 Message: 12461

Robert
the ac-4 is working fine. I did buy a board kit from Mike at heath kit shop, when It arrivesI will install then.
thanks
dale wt4t

-----Original Message-----
From: Robert Nohren <bnohrem@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Mar 9, 2013 7:22 am
Subject: Re: [DrakeRadio] problem with t4x

I understand, when the ac-4 goes, you're better off replacing it with a new replacement kit. I did, it wasn't much
money and it's relatively easy to do if you're at all handy.

Bob N4IBK
On Mar 8, 2013, at 3:57 PM, dalepavlicek wrote:

> went thru the t4x ,all the usual contact cleaning,pot cleaning,checked tubes etc. Put the rig on dummy load and went to set the bias,per the manual. When I go to tune, the ac-4
> makes a little differant sound , the meter shows no bias indication at all and with in about 10 seconds the pilot lights turn off. turn the switch back to SSB and in a few seconds the pilot lights come back on . I checked the ac-4 ,all voltages are correct including the bias voltages. any ideas where to start? never saw any smoke ,at least not yet.
> dale wt4t
>
>

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12462. Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 13:49:23 UTC
From: hglent
Topic: 12371 Message: 12462

--- In DrakeRadio@yahoogroups.com, Wes Bolin <k5apl@...> wrote:
>
> I want to thank you for your dedication to running this list. It (and you) helped through some troubleshooting of my 2B. Keep it up.
> Wes
>

I also thank you for the outstanding work running this list,and technical help.

You are appreciated. Your support has helped me work through some really interesting problems.

TNX es 73

Paul K.
WA0BAG

12463. Re: [DrakeRadio] Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 15:12:45 UTC
From: Chris Pinholster
Topic: 12371 Message: 12463

Hi Garey,
Thanks for moderating the list. I appreciate your efforts and the time it takes. I'm sure there are many out there like myself that read the list every day and are not heavy posters. Keep up the good work.
73
CHRIS PINHOLSTER
k4win@...

[Non-text portions of this message have been removed]

12464. Re: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 15:51:38 UTC
From: Garey Barrell
Topic: 12371 Message: 12464

See 'Jim', I told you he'd know! :-)

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Naturally, it could not have been me...
>
> 73
>
> Another Jim
> NU0C
>
>
>
>
> On Fri, 08 Mar 2013 17:39:59 -0500, Garey Barrell wrote:
>
>> Jim -
>>
>> Sorry, I should have been more specific. The 'other' Jim knows who he is!!! :-) I think
we each
>> have serious questions about the other! :-)
>>
>> He's been pretty quiet lately, I must not have offended him.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Jim Lowman wrote:
>>> Not sure which "Jim" you were addressing here, Garey. :-)
>>>
>>> 73 de Jim - AD6CW
>>>
>>> On 3/8/2013 7:23 AM, Garey Barrell wrote:
>>>> We are fortunate to have ~975 adults (sorry Jim!) who know how to use a delete key
when something offends their sensibilities,
>>>> rather than complain _to the list_ about my failings.

>>>>
>>
>
> --
> Ham Radio NU0C
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> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
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> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
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> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

12465. RE: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 16:42:49 UTC
From: Terrell Hamilton
Topic: 12371 Message: 12465

What a GREAT start on new nicknames! There's "Jim," "Another Jim," maybe "The Other Jim," or "Some Other Jim." How many Jim's do we have, anyway? Is there a "Slim Jim?" A "Diamond Jim?" The possibilities are endless!

Then there's the "Good Jim," and the "Bad Jim," giving the different Jims the ability to claim, "No, I'M the Good Jim," no matter how many Jims we have... they can ALL claim it!!

All you Jims, log in now and stake your claim to a name!

Terry (not a Jim) Hamilton

K7WLD Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Saturday, March 09, 2013 7:52 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Question for the group moderator

See 'Jim', I told you he'd know! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Naturally, it could not have been me...
>
> 73
>
> Another Jim
> NU0C
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> On Fri, 08 Mar 2013 17:39:59 -0500, Garey Barrell wrote:
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>> Sorry, I should have been more specific. The 'other' Jim knows who he is!!! :-) I think we each
>> have serious questions about the other! :-)

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>> He's been pretty quiet lately, I must not have offended him.
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>> 73, Garey - K4OAH
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>>> Not sure which "Jim" you were addressing here, Garey. :-)
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>>>> rather than complain _to the list_ about my failings.
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> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

12466. RE: [DrakeRadio] Re: Question for the group moderator

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 16:53:52 UTC
From: Jim Shorney
Topic: 12371 Message: 12466

I'm Jim2 on the RealisticDX list...

73

-JimNU0C

On Sat, 9 Mar 2013 08:42:49 -0800, Terrell Hamilton wrote:

>What a GREAT start on new nicknames! There's "Jim," "Another Jim," maybe
>"The Other Jim," or "Some Other Jim." How many Jim's do we have, anyway?
>Is there a "Slim Jim?" A "Diamond Jim?" The possibilities are endless!
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>
>
>Then there's the "Good Jim," and the "Bad Jim," giving the different Jims
>the ability to claim, "No, I'M the Good Jim," no matter how many Jims we
>have... they can ALL claim it!!
>
>All you Jims, log in now and stake your claim to a name!
>
>
>
>Terry (not a Jim) Hamilton
>
>K7WLD Wenatchee, WA
>
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>
>
>From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
>Behalf Of Garey Barrell
>Sent: Saturday, March 09, 2013 7:52 AM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Re: Question for the group moderator
>
>
>
>
>
>
>See 'Jim', I told you he'd know! :-)
>

>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
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>>> Jim -
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>>> Sorry, I should have been more specific. The 'other' Jim knows who he
>is!!! :-) I think we each
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>>>> Not sure which "Jim" you were addressing here, Garey. :-)
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>> --
>> Ham Radio NU0C
>> Lincoln, Nebraska, U.S.S.A.

>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
>GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>>
>> "Give a man a URL, and he will learn for an hour; teach him to Google, and
>he will learn for a lifetime."
>>
>> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
>> http://incolor.inetnebr.com/jshorney
>> http://www.nebraskaghosts.org
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>[Non-text portions of this message have been removed]
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
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HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12467. RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 18:16:38 UTC
From: Mark Pilant
Topic: 12467 Message: 12467

While I'm waiting to set up a local sched with (I hope) fixed TR-4
I thought I'd tackle an RV-4 (S/N 17670) I just picked up.

The RV-4 is in reasonable shape, but (of course :-) doesn't work
when I connect it up to my TR-4.

Doing some poking around, I disconnected to power lead to the VFO
and applied power from a separate power supply. (The RV-4 was
connected to the TR-4 but it was turned off.) I hooked the VFO
output to my scope and a counter, and the frequency range goes
from 4.89 MHz to 5.51 MHz with a nice clean sine wave output.

So far, so good.

However, when the VFO is connected back into the circuit and the
TR-4 is powered up, there is no voltage to the VFO. Voltage to
the base of Q3 is just about 4.5 VDC, which is a little high but
less than 10% high. (When the switch is in RCV or RCV/XMIT.)

I did use contact cleaner on the switch and the tube pins, but
that didn't affect anything.

I'm thinking Q3 might be toast, but I thought I'd pass this by the
knowledgeable folks on this list to see if I'm thinking right :-P

A couple if things I did notice is this RV-4 doesn't seem to have
the NE-2 neon light anywhere, and there don't appear to be any
provisions for FSK. SO I'm thinking this is a pretty early unit.

So many projects, so little time :-)

73

- Mark N1VQW

12468. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 19:42:46 UTC
From: Garey Barrell
Topic: 12467 Message: 12468

Mark -

Simple. Q3 is toast! Base voltage should never be higher than about 0.7 VDC. If you clip the
Collector lead of Q3, the PTO should have ~11VDCand be operational. A 2N3904 is a reasonable substitute.

Thereseem to be several RV-4 iterations. The earliest had an 0A2 VR tube and no Q3, also no panel
indicator. I believe there was anRV-4"B" to go with the TR-4"B" when both had the neon indicators
behind the MAIN TUNING fiducial like the B twins. There was no identification as such but this group
started at about s/n 27k and had the "B" ergonomic changes as well.

FSK is enabled by the terminal on the side of the PTO just behind the gearbox. It requires anexternal cap and diode switch for true FSK. Very few use FSK any more, just about all AFSK SSB.
Best accomplished by the CAR OSC shift as used in the T-4XC.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> provisions for FSK. SO I'm thinking this is a pretty early unit.
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>
> 73
>
> - Mark N1VQW
>
>

12469. Re: [DrakeRadio] Help Potentiometer of TR4-C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 20:03:14 UTC
From: Garey Barrell
Topic: 12459 Message: 12469

Frank -

Posting your need to the list is probably the best thing you can do. There are donor units around.

What is the problem with your unit?

Power switch? Most common, easiest to wire across it and control power with an external power strip.

Either of the potentiometer sections? Try a shot of CAIG FaderLube spray. This stuff works wonders
with pots that are just dirty, not damaged. If no luck, Drake used very common RTS pots, so it's
possible with care to swap out resistance elements or even wiper mechanics from donor pots.

These dual pots with switch are the bane of vintage gear, they just ain't making them any more. I
run all vintage gear from switchable power strips and control individual unit power with the
external switch OFF.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Radio Vintage wrote:
> Good Morning to All
> Can you help me, how can I repair and / or find a way to replace the potentiometer of TR4-C (RCVR-gain/Power / RF)
> Thanks for the advice
> Frank
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12470. Another B-Line "combined set" on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 22:01:56 UTC
From: Steve Wedge
Topic: 12470 Message: 12470

http://www.ebay.com/itm/Drake-T-4XB-R-4B-Unit-/121078156577?ssPageName=ADME:B:SS:US:1123

Have at it: I know this will go way above what I can afford, so I'm gonna just watch...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12471. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 23:36:50 UTC
From: Mark Pilant
Topic: 12467 Message: 12471

Hi Garey.

The thick plottens...

It turns out Q3 is fine. I tried a replacement (NTE 85, same base)
with no improvement. So I put both on my curve tracer (Tek 7CT1N)
and had the same curve traces, and looked fine.

Going back and measuring the (DC) voltages on Q3 I get:
B E C Switch
0.64 0 0.024 Off
0.51 0 0.008 RCV
0.51 0 0.008 RCV/XMIT
0.64 0 0.024 XMIT

Looking at the V1 plate connection (pins 1 & 6) I measure
240V
207V
207V
240V

for the same switch positions.

I did fine the neon light; it lights up the (12 oclock) dial indicator.
It lights up only in the RCV and RCV/XMIT positions as expected.

I'm not sure where I came up with 4.5V for Q3 in my last posting. That
is the voltage on V1 pins 3 & 8 in the RCV and RCV/XMIT switch positions.

All the wiring looks to be original. The only difference is in the
colors of the wires in the cable which plugs into the TR-4. But I took
off the cover of the plug to see which colored wires went to which pins.

Off to stare at the schematic (and scratch my head) some more...

73

- Mark N1VQW

12472. message

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-09 23:48:19 UTC
From: Don Adams
Topic: 12472 Message: 12472

http://modelcid.com/eju/xqwqdcqfnalog/kmkslmqkgsc/culubx/dfjpczxbswtxh

[Non-text portions of this message have been removed]

12473. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 00:02:52 UTC
From: Mark Pilant
Topic: 12467 Message: 12473

Hi Garey.

A little more information.

Looking at your CD, it appears the RV-4 I have corresponds to the schematic in the "RV-4C Manual". The colors match on the cable, and L3 is adjustable like my RV-3.

73

- Mark N1VQW

12474. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 02:53:21 UTC
From: Garey Barrell
Topic: 12467 Message: 12474

Mark -

OK. Well with the Emitter grounded you can't read more than about 0.7V or the transistor is blown.

Now.... If you just lift the Collector lead of Q3, you should read 11V on the PTO power lead. If
still near 0V, then the internalZener diode is shorted.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
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>
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> It turns out Q3 is fine. I tried a replacement (NTE 85, same base)
> with no improvement. So I put both on my curve tracer (Tek 7CT1N)
> and had the same curve traces, and looked fine.
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> Going back and measuring the (DC) voltages on Q3 I get:
> B E C Switch
> 0.64 0 0.024 Off
> 0.51 0 0.008 RCV
> 0.51 0 0.008 RCV/XMIT
> 0.64 0 0.024 XMIT
>
> Looking at the V1 plate connection (pins 1 & 6) I measure
> 240V
> 207V
> 207V
> 240V
>
> for the same switch positions.
>
> I did fine the neon light; it lights up the (12 oclock) dial indicator.
> It lights up only in the RCV and RCV/XMIT positions as expected.
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> colors of the wires in the cable which plugs into the TR-4. But I took
> off the cover of the plug to see which colored wires went to which pins.
>
> Off to stare at the schematic (and scratch my head) some more...
>
> 73
>
> - Mark N1VQW
>

12475. Re: [DrakeRadio] Help Potentiometer of TR4-C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 09:44:07 UTC
From: Radio Vintage
Topic: 12459 Message: 12475

Garey

The problem of the potentiometer, is as follows:
A part of Stick it carbon (part Audio) is consumed, is interrupted.

I would like to replace the audio portion of potenziometer, which today is the potentiometer (make and model) where to get the part to replace, (size and characteristics)

Bye Frank

Da: Garey Barrell <k4oah@...>
A: DrakeRadio@yahoogroups.com
Inviato: Sabato 9 Marzo 2013 21:03
Oggetto: Re: [DrakeRadio] Help Potentiometer of TR4-C

Frank -

Posting your need to the list is probably the best thing you can do. There are donor units around.

What is the problem with your unit?

Power switch? Most common, easiest to wire across it and control power with an external power strip.

Either of the potentiometer sections? Try a shot of CAIG FaderLube spray. This stuff works wonders
with pots that are just dirty, not damaged. If no luck, Drake used very common RTS pots, so it's
possible with care to swap out resistance elements or even wiper mechanics from donor pots.

These dual pots with switch are the bane of vintage gear, they just ain't making them any more. I
run all vintage gear from switchable power strips and control individual unit power with the
external switch OFF.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Radio Vintage wrote:
> Good Morning to All
> Can you help me, how can I repair and / or find a way to replace the potentiometer of

TR4-C (RCVR-gain/Power / RF)
> Thanks for the advice
> Frank
>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12476. Fw: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 10:04:41 UTC
From: g4jss@tiscali.co.uk
Topic: 12476 Message: 12476

Hi Garey
Pulled DR7 and fitted jumper board and a little bit of progress. I can hear the calib on all bands 14mhz and below but not on
21mhz upwards. BUT when I switch to 14 again I hear the calib. Now this is different because before if I switched to 21 it knocked all the
bands out of lock and now it doesn't do that.
Don't know if that helps.

Cheers
Vic - from a very cold UK

----Original Message----
From:
k4oah@...
Date: 08/03/2013 16:49
To: <DrakeRadio@yahoogroups.com>
Subj: Re: [DrakeRadio] Re: TR7 probs

Vic -

OK. Once it it
locked on a range it seems to be holding. Again, that indicateseither 'coarse' steering, -or- perhaps bad presets. This agrees with the
locking at turn-on, since the coarse
voltage goes past the necessary spot as it ramps up for the lock to grab it.

Since you have the
extender board set, remove the DR-7 and plug in the 'jumper card' from the
extender set. This makes it a TR-7 without digital display or
general coverage. Then see if you
can switch bands and/or whether the high or low VCO lockson each band. You can tune in the calibrator
on the higher bands so you can tell if it is locked or not. This test will eliminate the offsets. Do you have a service manual?

Yes, -3.7
is 'normal' for the -5V bus. This voltage is ONLY used to bias off the PIN diodesin the filter selection board, and anything over a volt
or so is good.

Please leave previous messages so we know where we have been. Perhaps one of the TR-7 specialists
will wake up and help!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>
g4jss@... wrote:
> Hi Garey
>
> Thank you.
>
> Yes I do have extender boards.
>
> Here is an update on how
things stand. This a.m. I put the band switch to 14mhz and
> then powered up. All OK on that band (locked) went down to 7mhz and still OK
so I left it there for a couple of hours and it remained
> locked and good sigs. Went back up to 14mhz after 2 hours and all of the bands
went into 'unlock'. So I switched off for a few minutes and
> set the bandswitch to 7mhz and powered up again - again locked and OK. After
a while moved to 14mhz and all bands went into unlock.
> Temperature?
>
> During the period I took some more readings on the power board
pins. 23.9v was still present on pin 2 but pin 1 only read
> -3.7v instead of -5v. I don't know if that low reading would affect the VCO's.

>
> Thinking about pulling the VCO board and measuring what is
> reaching that.
>
>

12477. Re: [DrakeRadio] Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 10:10:34 UTC
From: Keith Evans
Topic: 12476 Message: 12477

Hi Vic
Just off out to the radio club,
But have you got the Wire that goes through the DR7 onto the front band switch pcb connected.
It controls which synthesiser operates.
Just a thought
73
Keith G3VKW

riginal Message -----
From: g4jss@...
To: drakeradio@yahoogroups.com
Sent: Sunday, March 10, 2013 10:04 AM
Subject: Fw: [DrakeRadio] Re: TR7 probs

Hi Garey
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bands out of lock and now it doesn't do that.
Don't know if that helps.

Cheers
Vic - from a very cold UK

----Original Message----
From:
k4oah@mindspring.com
Date: 08/03/2013 16:49
To: <DrakeRadio@yahoogroups.com>
Subj: Re: [DrakeRadio] Re: TR7 probs

Vic -

OK. Once it it
locked on a range it seems to be holding. Again, that indicateseither 'coarse' steering, -or- perhaps bad presets. This agrees with the
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> reaching that.
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[Non-text portions of this message have been removed]

12478. Re: [DrakeRadio] Help Potentiometer of TR4-C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 15:41:03 UTC
From: Garey Barrell
Topic: 12459 Message: 12478

Frank -

I think your best bet is to post a 'wanted' to this list and perhaps to the 'Drakelist' at <http://drakelist@.../drakelist/listjoin.html>as well. A control from any TR-3/TR-4/C would work.

Analternative would be a single 500k audio pot with switch, which is very common, and just wire the
RF GAIN with a 10k resistor to emulate full CW rotation. The control is rarely used in most cases.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Radio Vintage wrote:
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> Bye Frank
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> _____
> Da: Garey Barrell <k4oah@...>
> A: DrakeRadio@yahoogroups.com
> Inviato: Sabato 9 Marzo 2013 21:03
> Oggetto: Re: [DrakeRadio] Help Potentiometer of TR4-C
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> Thanks for the advice
>> Frank
>>
>>

12479. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 15:46:05 UTC
From: Mark Pilant
Topic: 12467 Message: 12479

> If you just lift the Collector lead of Q3, you should read 11V on
> the PTO power lead. If still near 0V, then the internal Zener
> diode is shorted.

I'll have to give this a try, and see what turns up. I have to be a bit careful because I noticed with just the little but of work I did to replace the transistor, the traces/pads are starting to lift from the PCB. (BTW, I'm using a Weller temperature controlled soldering iron.)

I don't think the internal Zener is shorted because when I apply DC voltage to the PTO it works fine. (I used a current limited supply set at about 14 VDC to supply the PTO.)

I'm beginning to think it may be the switch itself, because it does really seem to be a problem in the switching circuitry (since the PTO work outside that environment).

73

- Mark N1VQW

12480. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 16:29:42 UTC
From: Garey Barrell
Topic: 12467 Message: 12480

Mark -

I missed that earlier.... Which is why I like to leave previous messagesinplace.

Obviously you are correct, the Zener can NOT be shorted. When the BASE voltage drops to about 0.5
V, the Collector should go to 11 V, allowing the PTO to run.

Pin 1 is +250 VDC, R15 and R17??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> really seem to be a problem in the switching circuitry (since the
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> 73
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> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

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12481. r4b audio problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 19:33:43 UTC
From: dalepavlicek
Topic: 12481 Message: 12481

I started to work on the r4b I just bought,cleaned it up contacts,switches pots etc. the seller said it was a real performer...YAH... any way, the rig does perform OK,somewhat, but the biggest thing I hear is bad audio, very narrow band and scratchy and seems much touchier to tune in a solid SSB signal than my old r4a. I checked around V7, all the resistances were within range except pin 6 read 4.6 instead of 15k. did a voltage check also .again everything checked very close ,pin 1 had 3.9 volt,book said should be 4.5. I did not have another 6eh5 to sub. Maybe Iam going in the wrong direction, for this problem. The sensitivity does seem down compared to my r4a. no amount of playing with the tuning, passband ,notch or filter setting effects the crummy audio.
I guess its time to say Help.
thanks
dale wt4t

12482. Re: [DrakeRadio] r4b audio problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 19:44:29 UTC
From: Garey Barrell
Topic: 12481 Message: 12482

Dale -

Voltage ok on Pin 6? Check value of R44, condition of C176. Cathode voltage low says tube not
drawing expected current.

Voltage on C173? DC voltages on Q7?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dalepavlicek wrote:
> I started to work on the r4b I just bought,cleaned it up contacts,switches pots etc. the seller said it was a real performer...YAH... any way, the rig does perform OK,somewhat, but the biggest thing I hear is bad audio, very narrow band and scratchy and seems much touchier to tune in a solid SSB signal than my old r4a. I checked around V7, all the resistances were within range except pin 6 read 4.6 instead of 15k. did a voltage check also .again everything checked very close ,pin 1 had 3.9 volt,book said should be 4.5. I did not have another 6eh5 to sub. Maybe Iam going in the wrong direction, for this problem. The sensitivity does seem down compared to my r4a. no amount of playing with the tuning, passband ,notch or filter setting effects the crummy audio.
> I guess its time to say Help.
> thanks
> dale wt4t
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> Yahoo! Groups Links
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12483. Re: [DrakeRadio] r4b audio problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 20:19:36 UTC
From: yash@aol.com
Topic: 12481 Message: 12483

Garey
pin 6 voltage is 126.5 ,measured voltage on c-173 is 79.8vdc and measuring voltages on Q7 , Its all -.028 0n all legs of the device.
make any sense?
dale

-----Original Message-----
From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, Mar 10, 2013 3:44 pm
Subject: Re: [DrakeRadio] r4b audio problem

Dale -

Voltage ok on Pin 6? Check value of R44, condition of C176. Cathode voltage low says tube not
drawing expected current.

Voltage on C173? DC voltages on Q7?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

dalepavlicek wrote:
> I started to work on the r4b I just bought,cleaned it up contacts,switches pots etc. the seller said it was a real performer...YAH... any way, the rig does perform OK,somewhat, but the biggest thing I hear is bad audio, very narrow band and scratchy and seems much touchier to tune in a solid SSB signal than my old r4a. I checked around V7, all the resistances were within range except pin 6 read 4.6 instead of 15k. did a voltage check also .again everything checked very close ,pin 1 had 3.9 volt,book said should be 4.5. I did not have another 6eh5 to sub. Maybe Iam going in the wrong direction, for this problem. The sensitivity does seem down compared to my r4a. no amount of playing with the tuning, passband ,notch or filter setting effects the crummy audio.
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[Non-text portions of this message have been removed]

12484. Re: [DrakeRadio] r4b audio problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 20:24:28 UTC
From: yash@aol.com
Topic: 12481 Message: 12484

Garey
Iam not getting any reading on the 3 legs of Q7, maybe Iam doing something wrong?? or checking the wrong thing.
dale

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, Mar 10, 2013 3:44 pm
Subject: Re: [DrakeRadio] r4b audio problem

Dale -

Voltage ok on Pin 6? Check value of R44, condition of C176. Cathode voltage low says tube not
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Voltage on C173? DC voltages on Q7?

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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[Non-text portions of this message have been removed]

12485. Re: [DrakeRadio] r4b audio problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-10 21:30:40 UTC
From: Garey Barrell
Topic: 12481 Message: 12485

Well if those readings are accurate, you've found your problem.

You should have ~12 on C173. Q5, 6 and7 are all suspect, along with switch S2(rear).

See attached.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Garey
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, Its all -.028 0n all legs of the device.
> make any sense?
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>
>
>
> -----Original Message-----
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sun, Mar 10, 2013 3:44 pm
> Subject: Re: [DrakeRadio] r4b audio problem
>
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> Dale -
>
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> 73, Garey - K4OAH
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> dalepavlicek wrote:
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12486. TR-4Cw Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 15:50:28 UTC
From: slowcountry1
Topic: 12486 Message: 12486

Restarting my interest in Ham radio and putting my TR-4Cw back into service; I have replaced and or repaired all of the miscellaneous items, for the exception of the VOX circuit, and now have a wonderful rig again. (Still trying to sort out the VOX issues) I truly appreciate everyone's gracious assistance.

Since I have made the repairs and I plan on maintaining my Drakes for years to come, I figure that I should learn how to align the unit myself. The alignment procedures in the manual appears to leave some questions for those of us that grew up in the semi-conductor age and have not aligned a tube type rig. A couple of the steps appear ambiguous to me. The manual calls for alignment with a VTVM. I do not have a VTVM, but a Fluke 289 and other digital volt meters. Reading on the subject and talking to a local ham indicates that DMMs are not the way to go when attempting an alignment.

I would like to find out if there is a method that will employ a DMM to facilitate a proper alignment or what type of meter that I should procure for this venture. If all else fails, I have a local ham that is extremely knowledgeable and capable of aligning the rig however; as stated previously, I would like to attempt this task.

Again thanks for all the help!!!

12487. Re: [DrakeRadio] TR-4Cw Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 16:38:36 UTC
From: Barry
Topic: 12486 Message: 12487

The primary reason to use a VTVM is it presents a very high impedance to the circuit under test. It is probably one of the very reasons they were invented. Low impedance measurements will yield very different readings and can cause the circuit to stop working completely.

While you might be able to replicate, somewhat, the high impedance measurement with your DVM (using a probe with an appropriate high value resistor, etc.), there is nothing quite like using a nice analog meter when tuning for peaks and/or nulls. Even with bar-style readouts, etc., it is something that a DVM just lacks.

Good luck with it. I would think there would be more test equipment you'd need (signal generator(s), scope, etc.) but a good VTVM is hard to beat when it comes to alignment time.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, March 11, 2013 10:50:28 AM
> Subject: [DrakeRadio] TR-4Cw Alignment
>
> Restarting my interest in Ham radio and putting my TR-4Cw back into
> service; I have replaced and or repaired all of the miscellaneous
> items, for the exception of the VOX circuit, and now have a
> wonderful rig again. (Still trying to sort out the VOX issues) I
> truly appreciate everyone's gracious assistance.
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> years to come, I figure that I should learn how to align the unit
> myself. The alignment procedures in the manual appears to leave
> some questions for those of us that grew up in the semi-conductor
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> meters. Reading on the subject and talking to a local ham indicates
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> to facilitate a proper alignment or what type of meter that I should
> procure for this venture. If all else fails, I have a local ham
> that is extremely knowledgeable and capable of aligning the rig
> however; as stated previously, I would like to attempt this task.
>
> Again thanks for all the help!!!
>
>

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12488. need manual for early version of TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 17:00:22 UTC
From: turbo_plumber
Topic: 12488 Message: 12488

does anyone have a manual and schematic for the early series TR-6 that has the 2 trimmer caps on top of the chassis and no T-17 I think it is.

what do the trimmers do , mine only puts out about 95 watts with new finals (I dont have a new driver tube (6GK6) yet but swapping the two in the radio made it loose 15 more watts output. Hopefully a new driver tube will get it up to 150 or 160 watts out like Im guessing it should be able to do

Thanks
Doug
KD8HLV

12489. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 17:07:20 UTC
From: Ken Winterling
Topic: 12343 Message: 12489

Garey,

I am working on a T-4XC and, among other components, will be replacing the final cathode resistors, R53 and R54, and screen resistors, R50 and R51. In the past I used CC replacements from my stock but this time I plan on using the Ohmite OX/OY ceramics.

Below you mentioned that Drake tightened the spec to 5% (from 10%). Unless I missed it, the OX and OY series seem to be available in 10% only. Do you have a link and/or part number to 5% devices?

Thanks,

Ken
WA2LBI

On Mon, Mar 4, 2013 at 4:43 PM, Garey Barrell <k4oah@...> wrote:

> Doug -
>
> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called
> 'Screen') resistors and are
> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and
> in this case have no
> resistors.
>
> Most resistors are 5% tolerance, which is indicated by the fourth color
> band on the resistor being
> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is the
> tolerance for the value
> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these
> are 10% resistors.
>
> The 15 ohm resistors are also marked 10%, but Drake tightened that up to
> 5% since it directly
> affects how total current is shared by the three tubes. This means they
> should be 15 ohms +/- 0.75
> ohms. Yours are out of spec even at 10% and should be replaced. It's
> best if they are all within
> 5% of each other. The best replacements are the Ohmite OY ceramic
> composition resistors. Carbon
> and metal film resistors don't hold up well under the current surges these
> resistors are subject to.
>
> 73, Garey - K4OAH
> Glen Allen, VA

>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > I have finished the work that I had planned on my TR-4Cw. Prior to
> putting it back in its case, a local knowledgeable ham suggested that I
> check the values of the cathode and grid resistors. My knowledge of tubes
> is very limited, I believe this is what he called them.
> >
> > The schematic that I have is very faint. I see resistors R176, R177,
> R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values
> with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks
> like it wants 68 ohms, very hard to read. I believe these to be the grid
> resistors.
> >
> > I see resistors R93, R167 and R121 that connect between pins 3 and 9 on
> the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and
> 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to
> read. I believe these to be the cathode resistors.
> >
> > First off, can someone verify that I have used grid and cathode
> resistors as the correct terms; second are these values close enough in
> tolerance or should I replace them (I would have expected a carbon comp
> resistor to increase in resistance); third have I measured the correct
> resistors at the correct pins?
> >
> > I made the measurements with my Fluke 289 and double checked against
> another DVMM so I'm content that the readings are accurate.
> >
> > I have replaced the electrolytics with the Hayseed Hams product. Are
> there any other items that I should check prior to putting the unit into
> normal everyday use?
> >
> > Thanks,
> >
> > Doug
> >
>

[Non-text portions of this message have been removed]

12490. Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 18:13:12 UTC
From: slowcountry1
Topic: 12343 Message: 12490

--- In DrakeRadio@yahoogroups.com, Ken Winterling <wa2lbi@...> wrote:
>
> Garey,
>
> I am working on a T-4XC and, among other components, will be replacing the
> final cathode resistors, R53 and R54, and screen resistors, R50 and R51.
> In the past I used CC replacements from my stock but this time I plan on
> using the Ohmite OX/OY ceramics.
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> Below you mentioned that Drake tightened the spec to 5% (from 10%). Unless
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> have a link and/or part number to 5% devices?
>
> Thanks,
>
> Ken
> WA2LBI
>
>
> On Mon, Mar 4, 2013 at 4:43 PM, Garey Barrell <k4oah@...> wrote:
>
> > Doug -
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> > ohms. Yours are out of spec even at 10% and should be replaced. It's
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> > and metal film resistors don't hold up well under the current surges these

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> > normal everyday use?
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> > > Thanks,
> > >
> > > Doug
> > >
> >
>
> [Non-text portions of this message have been removed]
>
Ken,

The OX an OY series come in 10% tolerance there is not a 5% tolerance in this line, so far as I could tell.

What I did was purchase 12 each of the values required and ohm'd each one until I found 3 of each that were close in value and close to the value required. There was definitely 10% variation.

For the 15 ohm 2 watt resistors I was able to find 15.23, 15.07, and 15.18. For the 68 ohm 1 watt I was able to find 67.84, 67.73 and 68.41. I figured I'd purchase extras because I have two other radios that I am going to do however; the values are far from what I wanted therefore I picked the closest matches for this exchange. Someone may have a more logical approach however; this is how I got what I needed.

12491. Re: need manual for early version of TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 18:15:51 UTC
From: slowcountry1
Topic: 12488 Message: 12491

--- In DrakeRadio@yahoogroups.com, "turbo_plumber" <turboplumber@...> wrote:
>
> does anyone have a manual and schematic for the early series TR-6 that has the 2 trimmer caps on top of the chassis and no T-17 I think it is.
>
> what do the trimmers do , mine only puts out about 95 watts with new finals (I dont have a new driver tube (6GK6) yet but swapping the two in the radio made it loose 15 more watts output. Hopefully a new driver tube will get it up to 150 or 160 watts out like Im guessing it should be able to do
>
> Thanks
> Doug
> KD8HLV
>
Doug,

I don't know the version differences of the TR-6 early or late, however I have the manual that was supplied with my TR-6. The rig's serial number is 409. If this would help, I could try to scan the schematic and send it.

12492. Re: [DrakeRadio] TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 18:24:02 UTC
From: Garey Barrell
Topic: 12343 Message: 12492

Ken -

Well I buy 10 at a time, and usually find five pairs. Like most modern components, they're much
tighter than specified most of thetime. I pick a pair that are within 10% of 15 ohms, and within 5%
or less of each other. They directly affect the 'match' between the finals, so the closer the
better. There's nothing wrong with the carbon comps, as long as they are in spec. You can get 2W
units in there, so that's better still. They are making carbon comp resistors again, but all I can
find are 1/4 or 1/2W types.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ken Winterling wrote:
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>> Doug
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> [Non-text portions of this message have been removed]
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12493. Re: [DrakeRadio] need manual for early version of TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 18:32:33 UTC
From: Garey Barrell
Topic: 12488 Message: 12493

Doug -

I have a scan of Milt Sullivan's copy of the TR-6 manual with schematic 0001. I have another
schematic dated 012770 with no serial number. Those are the only two I know of...

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

turbo_plumber wrote:
> does anyone have a manual and schematic for the early series TR-6 that has the 2 trimmer caps on top of the chassis and no T-17 I think it is.
>
> what do the trimmers do , mine only puts out about 95 watts with new finals (I dont have a new driver tube (6GK6) yet but swapping the two in the radio made it loose 15 more watts output. Hopefully a new driver tube will get it up to 150 or 160 watts out like Im guessing it should be able to do
>
> Thanks
> Doug
> KD8HLV
>

12494. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 18:53:55 UTC
From: Garey Barrell
Topic: 12343 Message: 12494

The 68 ohm resistors are not nearly as critical. They are merely decoupling the screen voltage and
have no real effect on PA current. Most any modern resistor is fine here.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Ken Winterling <wa2lbi@...> wrote:
>> Garey,
>>
>> I am working on a T-4XC and, among other components, will be replacing the
>> final cathode resistors, R53 and R54, and screen resistors, R50 and R51.
>> In the past I used CC replacements from my stock but this time I plan on
>> using the Ohmite OX/OY ceramics.
>>
>> Below you mentioned that Drake tightened the spec to 5% (from 10%). Unless
>> I missed it, the OX and OY series seem to be available in 10% only. Do you
>> have a link and/or part number to 5% devices?
>>
>> Thanks,
>>
>> Ken
>> WA2LBI
>>
>>
>> On Mon, Mar 4, 2013 at 4:43 PM, Garey Barrell <k4oah@...> wrote:
>>
>>> Doug -
>>>
>>> Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called
>>> 'Screen') resistors and are
>>> the ones to check. Pin 2 is the Control Grid (commonly called 'Grid') and
>>> in this case have no
>>> resistors.
>>>
>>> Most resistors are 5% tolerance, which is indicated by the fourth color
>>> band on the resistor being
>>> 'gold'. If the fourthband is 'silver', the resistor is 10%. This is the
>>> tolerance for the value
>>> marked when new. So 68 ohm +/- 6.8 ohms is what you should read as these

>>> are 10% resistors.
>>>
>>> The 15 ohm resistors are also marked 10%, but Drake tightened that up to
>>> 5% since it directly
>>> affects how total current is shared by the three tubes. This means they
>>> should be 15 ohms +/- 0.75
>>> ohms. Yours are out of spec even at 10% and should be replaced. It's
>>> best if they are all within
>>> 5% of each other. The best replacements are the Ohmite OY ceramic
>>> composition resistors. Carbon
>>> and metal film resistors don't hold up well under the current surges these
>>> resistors are subject to.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> slowcountry1 wrote:
>>>> I have finished the work that I had planned on my TR-4Cw. Prior to
>>> putting it back in its case, a local knowledgeable ham suggested that I
>>> check the values of the cathode and grid resistors. My knowledge of tubes
>>> is very limited, I believe this is what he called them.
>>>> The schematic that I have is very faint. I see resistors R176, R177,
>>> R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The values
>>> with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic looks
>>> like it wants 68 ohms, very hard to read. I believe these to be the grid
>>> resistors.
>>>> I see resistors R93, R167 and R121 that connect between pins 3 and 9 on
>>> the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and
>>> 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard to
>>> read. I believe these to be the cathode resistors.
>>>> First off, can someone verify that I have used grid and cathode
>>> resistors as the correct terms; second are these values close enough in
>>> tolerance or should I replace them (I would have expected a carbon comp
>>> resistor to increase in resistance); third have I measured the correct
>>> resistors at the correct pins?
>>>> I made the measurements with my Fluke 289 and double checked against
>>> another DVMM so I'm content that the readings are accurate.
>>>> I have replaced the electrolytics with the Hayseed Hams product. Are
>>> there any other items that I should check prior to putting the unit into
>>> normal everyday use?
>>>> Thanks,
>>>>
>>>> Doug
>>>>
>>
>> [Non-text portions of this message have been removed]

>>
> Ken,
>
> The OX an OY series come in 10% tolerance there is not a 5% tolerance in this line, so far as I could tell.
>
> What I did was purchase 12 each of the values required and ohm'd each one until I found 3 of each that were close in value and close to the value required. There was definitely 10% variation.
>
> For the 15 ohm 2 watt resistors I was able to find 15.23, 15.07, and 15.18. For the 68 ohm 1 watt I was able to find 67.84, 67.73 and 68.41. I figured I'd purchase extras because I have two other radios that I am going to do however; the values are far from what I wanted therefore I picked the closest matches for this exchange. Someone may have a more logical approach however; this is how I got what I needed.
>
>

12495. TR-7 puzzlement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 20:22:00 UTC
From: Gary Woods
Topic: 12495 Message: 12495

Well, I'm finally getting back into my TR-7 that died months (perhaps 12 or more) ago.... the blown fuse was caused by a shorted 10-Volt pass regulator that was murdered by a dead short on the +10 buss. Fairly quickly narrowed it to the translator board, BUT: there's no short when the board is on extenders, no visible marks where things might have been touching the chassis. I even put a strip of masking tape between a shield cover and the connector where the +10 arrives. No joy. Next will be to solder-suck a couple of reachable components and perhaps +10 the pin on the socket that plugs onto the motherboard.
Any interesting war stories? Can't even use my lo-ohm shortsqueek finder down in the shielded compartment.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

12496. Re: need manual for early version of TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 21:00:20 UTC
From: turbo_plumber
Topic: 12488 Message: 12496

Garey my radio is ser#036 can I get a copy of that from you somehow? I have what I guess is a later model manual and schematic and it shows T17 which my radio does not have. Im sure some of it applies but it woul;d be nice to have the right one, especially alignment info

thanks
Doug
--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I have a scan of Milt Sullivan's copy of the TR-6 manual with schematic 0001. I have another
> schematic dated 012770 with no serial number. Those are the only two I know of...
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> turbo_plumber wrote:
> > does anyone have a manual and schematic for the early series TR-6 that has the 2 trimmer caps on top of the chassis and no T-17 I think it is.
> >
> > what do the trimmers do , mine only puts out about 95 watts with new finals (I dont have a new driver tube (6GK6) yet but swapping the two in the radio made it loose 15 more watts output. Hopefully a new driver tube will get it up to 150 or 160 watts out like Im guessing it should be able to do
> >
> > Thanks
> > Doug
> > KD8HLV
> >
>

12497. Re: [DrakeRadio] TR-7 puzzlement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 22:14:26 UTC
From: Jim Shorney
Topic: 12495 Message: 12497

I had a case one time where a component on a PCB had been bent just a little too close to the female Molex connector. The male pin from the parent board would portrude through the body of the female connector just enough to make contact with the component when the board was fully seated. Pull the board up just slightly, and all was well. Once I figured it out, I simply re-formed the offending component to not be so close.

73

-Jim
NU0C

On Mon, 11 Mar 2013 16:22:00 -0400, Gary Woods wrote:

>Well, I'm finally getting back into my TR-7 that died months (perhaps 12 or
>more) ago.... the blown fuse was caused by a shorted 10-Volt pass
>regulator that was murdered by a dead short on the +10 buss. Fairly
>quickly narrowed it to the translator board, BUT: there's no short when
>the board is on extenders, no visible marks where things might have been
>touching the chassis. I even put a strip of masking tape between a shield
>cover and the connector where the +10 arrives. No joy. Next will be to
>solder-suck a couple of reachable components and perhaps +10 the pin on the
>socket that plugs onto the motherboard.
>Any interesting war stories? Can't even use my lo-ohm shortsqueek finder
>down in the shielded compartment.
>
>
>--
>Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
>Zone 5/4 in upstate New York, 1420' elevation. NY WO G
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12498. Re: need manual for early version of TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 21:43:51 UTC
From: turbo_plumber
Topic: 12488 Message: 12498

Thank yo but that is probably the manual I have if the top view of the chassis shows 2 big trimmer caps on the left side with the radio facing you and there is no T-17 can on my radio which the my ser 036 does not have.

> > does anyone have a manual and schematic for the early series TR-6 that has the 2 trimmer caps on top of the chassis and no T-17 I think it is.
>

> >
> Doug,
>
> I don't know the version differences of the TR-6 early or late, however I have the manual that was supplied with my TR-6. The rig's serial number is 409. If this would help, I could try to scan the schematic and send it.
>

12499. Re: TR-4Cw VOX problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 22:39:55 UTC
From: slowcountry1
Topic: 12391 Message: 12499

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > slowcountry1 wrote:
> > >
> > > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Doug -
> > >>
> > >> Try bridging an electrolytic across C145C. I think you should be seeing a higher DC voltage
> > >> onCathode of D5 when you whistle into the mic. By the way, whistling is better for the mic than
> > >> driving nails with it! :-) This DC voltage is supposed to charge C143 to full voltage
> > >> immediately, and then be dischargedover a second or two via R106. If you disconnect R106 the
> > >> voltage should stay up across the C143 for longer. R106 is selected for VOX DELAY. It's possible
> > >> that C143 is leaky, although not likely.
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> slowcountry1 wrote:
> > >>> With the vox control fully CW and anti-vox fully CCW, if I loudly whistle or tap the mic on the bench, I can activate VOX and then it will drop right out. With PTT depressed, transmit audio is good, with sufficient audio. With the PTT not depressed, if I stick my ear to the speaker, I can hear the mic if I tap it on the bench however; I cannot hear my voice.
> > >>>
> > >>> I replaced V19 6FQ7 to no avail. For smiles and grins, I replaced V18 12AX7. As discussed on someone else post, I measured the cathode of D5 and saw 10.3 VDC. I checked pin 2 of V19 and read -9.057VDC. If I tap the mic on the bench, pin 2 will go to zero. It takes a very loud noise to trigger the VOX.
> > >>>
> > >>> Any other suggestions to activate VOX. I am using the factory Drake hand mic that used to operate VOX quite nicely. Again, this rig has been on the shelf 8 year plus since I have used it. BTW, I'm aware taping the mic on the bench is not a good thing.

> > >>>
> > >>> Thanks,
> > >>>
> > >>> Doug
> > >>>
> > >>>
> > >>>
> > >>> ------------------------------------
> > >>>
> > >>> Yahoo! Groups Links
> > >>>
> > >>>
> > >>>
> > >>>
> > > Gary,
> > >
> > > Again, you will have to excuse my ignorance. From my schematic, I see C145C as the multiple cap at the front of the radio in front of V18 as 10uf 50V. I have already replaced this with the set from Hayseed Hams. As new caps can be bad, I bridged pin 8 of V19 to ground with a 10uf electrolytic as suggested.
> > >
> > > First I need to make sure that I am looking at the correct diode for D5. I see this coming from Pin 6 of V19 on a vertical board next to V19. I stated that I had a +ve voltage of 10.3VDC on the cathode of the diode however; it is actually a -10.3VDC that goes to 0 on a heavy whistle. I really have to make some noise for it to register.
> > >
> > > I see C143 being a yellow 200VDC cap on the same side of the board as I see D5. The 3.3K shorting resistor R106 I see on the opposite side of the same board.
> > >
> > > I took a picture of the board that I am looking at for reference.
> > >
> > > Again, I greatly apologize for all of the remedial questions however; I need to make sure I am looking at the correct components or none of this will fit together. I am very appreciative of your assistance.
> > >
> > > Doug
> > >
> > >
> > >
> > Doug -
> >
> > D5 is on the same board as C143, withit's Cathode lead tied to the terminal at the topof the board,
> > same as C143.
> >
> > What is supposed to happen is that audio from the MIC AMP stage is applied to the Grid of V19a (Pin
> > 7 from the wiper of the VOX control. It is ampllified and coupled out of the Plate of V19a (Pin 6)
> > via C141 to the Anode of D5. The AC signal is rectified by D5, making positive pulses

that are
> > integrated in C143. The Grid of V19b is normally held slightly negative to cut off current through
> > that section. When a positive voltage is developed across C143, it is enoughto overcome the negative
> > voltage on the Grid, driving it positive and causing V19b to conduct heavily, pulling the the relay.
> > R106 discharges C143 so that in the absence of audio the integrated voltage drops to zero, allowing
> > the negative bias to again cut off V19b, and releasing the relay.
> >
> > The ANTI-VOX takes a bit of signal from the receiveraudio and it is rectified by D6 and the
> > resultant _negative_ voltage is integrated in C144 and used to balance the VOX signal. This is to
> > prevent audio from the speaker tripping the VOX circuit on in receive.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
>
> Garey,
>
> Today, I bridged the C145C with a 45uf cap instead of a 10uf cap and that produced no results. I looked everything over and I'm not finding a culprit. For smiles and grins, I removed R106 from the circuit however; it did hold the relay in a little bit longer but not much. It actually measured 3.7K instead of 3.3K. I soldered it back in. For some reason, to which I cannot explain, the VOX will now work with normal voice however; the VOX gain has to be turned all the way CW. Any movement off full CW and it will not work.
>
> Doug
>

Ok, I found the VOX issue. It was the VOX potentiometer the entire time. When I first started chasing down the problem, I ohm'd one leg to the other and had about 485 KOHM and checked the wiper to each leg, while turning the POT; it changed in value as expected and did not show issue. I was very frustrated today and ripped the pot back out and remeasured. The POT was open between the two legs, I opened it up and all the resistive trace came out on the bench. I then went to my parts rig and pulled bothe the VOX and side tone pot and found them to both be defective. I pulled the side tone pot out of my good rig and installed it in place of the VOX pot. I took the 200KOHM antiVOX pot out of the donor unit and placed it in the side tone position on the good rig until I can find a working replacement.

Does anyone know where to locate the 500k pot for the VOX control? I'm assuming this to be an obsolete part?

Thanks to the group.

Doug Coffman

12500. Re: [DrakeRadio] RV-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 01:00:52 UTC
From: Mark Pilant
Topic: 12467 Message: 12500

Hi Garey.

> Which is why I like to leave previous messagesinplace.

Yep. I understand. I try to trim the message to which I'm responding so the points made are left intact.

Previous messages work as long as there aren't lots and lots of them. It is difficult to follow a message which includes 5-10 replies to the original post. Especially on something with limited screen real estate (like a smart phone). I make use of (my own and Yahoo's) message archives to refresh my memory about a topic.

Anyway, the problem has been solved and I'll do another post with all the details.

73

- Mark N1VQW

12501. My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 01:23:53 UTC
From: Carl Maniscalco
Topic: 12501 Message: 12501

Hello, all—

My TR-7 recently developed a glitch: It works properly when I first turn it on but after about ten minutes, the tuned frequency will drop exactly 500 kHz. Once this has happened, pressing either the "UP" or "DOWN" keys, changes the frequency in 1 MHz increments rather than the normal 500 kHz step, although the LED display will flash the 500 kHz increment for a fraction of a second on the way past. A quick off-on power cycle doesn't eliminate the problem; letting it sit overnight does, which leads me to believe it's a thermal issue. I have not yet had the opportunity to test how long it needs to be powered down before it returns to normal operation.

Any ideas on why this is happening and how I might go about fixing it?

73,

Carl Maniscalco, KJ6BSO

12502. Re: [DrakeRadio] RV-4 problems... solution found

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 01:23:50 UTC
From: Mark Pilant
Topic: 12467 Message: 12502

To recap...

I picked up an RV-4 which was pretty reasonable from a cosmetic standpoint, but had no output when switched to RCV or RCV/XMIT. The neon "activity" indicator would illuminate as did the dial back light.

Now on to diagnosis...

The first thing I did was to use contact cleaner on the switch as well as the tube socket. After that, I pulled the RV-4 from the cabinet and connected it to my (work in progress) TR-4 and fired it up. No output, as the seller indicated.

Checking the PTO supply voltage on Q3's collector showed only about .5 - .6 VDC regardless of the position of the RV-4 switch.

So, I pulled the PTO supply lead from the small PC board and applied about 14 VDC from a current limited supply. Using my 'scope to monitor the PTO output I was rewarded with a nice looking sine wave. Hooking up my frequency counter instead of the 'scope indicated a frequency range from 4.89 - 5.51 MHz.

I was very pleased to find out the PTO was working fine.

Given there was only limited voltage on Q3's collector, I made the decision to replace it; think it was shorted. However with a new (NTE-85) replacement in place, nothing changed.

So next, I put the original 2N3394 and the NTE-85 in my curve tracer to see if they were OK. After setting up the controls appropriately, I was rewarded with a set of fine looking curves for both transistors.

Next, I measured the supply side voltages for both R15 and R17. They looked to be appropriate. About 245 VDC for R17 and 210 or 245 VDC for R15 depending on the switch setting. The higher for OFF and XMIT positions and the lower for the RCV and RCV/XMIT positions.

After this, I followed Garey's suggestion and took the collector of Q3 out of the picture. What I did was to lift the Q3 side of R15 and the PTO V+ lead from the small PCB and connect them together with a clip lead. When I measured the PTO supply voltage it was 0.

So after just a bit of head scratching, I decided to measure the resistance of R15. It was OPEN!!!!.

Finding a suitable replacement and hooking everything back
together with clip leads I ran the RV-4 through the switch positions
and everything worked!!!! Time for the "Happy Dance" :-)

The only problem I need to resolve at the moment is to find an
appropriate replacement for R15 which will fit in the space. The
one I have clip leaded into position is a 10w resistor, and it is
too long to fit into place. Oh yes, I'll need to do an alignment
as well.

Through all this I did learn an important lesson.

One needs to be careful with the PCB. Even with a temperature
controlled soldering iron I was starting to have problems with the
traces lifting due to the heat.

Garey, thank you for your continuing help and support for all
things Drake :-) :-)

So that's it... for the archives.

73

- Mark

12503. Re: [DrakeRadio] RV-4 problems... solution found

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 01:27:06 UTC
From: Mark Pilant
Topic: 12467 Message: 12503

Oh yes. Through all of this, I discovered I actually had an
RV-4C rather than an RV-4.

73
- Mark N1VQW

12504. Re: [DrakeRadio] RV-4 problems... solution found

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 01:29:29 UTC
From: Mark Pilant
Topic: 12467 Message: 12504

This didn't seem to make it the first time. Sorry if a duplicate.

- Mark

To recap...

I picked up an RV-4 which was pretty reasonable from a cosmetic standpoint, but had no output when switched to RCV or RCV/XMIT. The neon "activity" indicator would illuminate as did the dial back light.

Now on to diagnosis...

The first thing I did was to use contact cleaner on the switch as well as the tube socket. After that, I pulled the RV-4 from the cabinet and connected it to my (work in progress) TR-4 and fired it up. No output, as the seller indicated.

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The only problem I need to resolve at the moment is to find an appropriate replacement for R15 which will fit in the space. The one I have clip leaded into position is a 10w resistor, and it is too long to fit into place. Oh yes, I'll need to do an alignment as well.

Through all this I did learn an important lesson.

One needs to be careful with the PCB. Even with a temperature controlled soldering iron I was starting to have problems with the traces lifting due to the heat.

Garey, thank you for your continuing help and support for all things Drake :-) :-)

So that's it... for the archives.

73

- Mark

12505. Re: [DrakeRadio] RV-4 problems... solution found

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 02:21:19 UTC
From: Garey Barrell
Topic: 12467 Message: 12505

Mark -

Don't go too small on R15, it dissipates 4W..... That 10W would be a good choice if you can
shoehorn it in there!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> To recap...
>
> I picked up an RV-4 which was pretty reasonable from a cosmetic
> standpoint, but had no output when switched to RCV or RCV/XMIT.
> The neon "activity" indicator would illuminate as did the dial
> back light.
>
> Now on to diagnosis...
>
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> as well as the tube socket. After that, I pulled the RV-4 from
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> fired it up. No output, as the seller indicated.
>
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> about .5 - .6 VDC regardless of the position of the RV-4 switch.
>
> So, I pulled the PTO supply lead from the small PC board and
> applied about 14 VDC from a current limited supply. Using my
> 'scope to monitor the PTO output I was rewarded with a nice
> looking sine wave. Hooking up my frequency counter instead of
> the 'scope indicated a frequency range from 4.89 - 5.51 MHz.
>
> I was very pleased to find out the PTO was working fine.
>
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> the decision to replace it; think it was shorted. However with
> a new (NTE-85) replacement in place, nothing changed.
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> tracer to see if they were OK. After setting up the controls
> appropriately, I was rewarded with a set of fine looking curves

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>
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> They looked to be appropriate. About 245 VDC for R17 and 210
> or 245 VDC for R15 depending on the switch setting. The higher
> for OFF and XMIT positions and the lower for the RCV and RCV/XMIT
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> together with a clip lead. When I measured the PTO supply voltage
> it was 0.
>
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> resistance of R15. It was OPEN!!!!.
>
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> and everything worked!!!! Time for the "Happy Dance" :-)
>
> The only problem I need to resolve at the moment is to find an
> appropriate replacement for R15 which will fit in the space. The
> one I have clip leaded into position is a 10w resistor, and it is
> too long to fit into place. Oh yes, I'll need to do an alignment
> as well.
>
> Through all this I did learn an important lesson.
>
> One needs to be careful with the PCB. Even with a temperature
> controlled soldering iron I was starting to have problems with the
> traces lifting due to the heat.
>
> Garey, thank you for your continuing help and support for all
> things Drake :-) :-)
>
> So that's it... for the archives.
>
> 73
>
> - Mark
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

12506. Re: [DrakeRadio] TR-7 puzzlement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 02:51:45 UTC
From: scpmiller@...
Topic: 12495 Message: 12506

I found a shorted cap on the 10 volt line going into the first mixer board. When I first looked at it, I didn't realize that the odd looking brownish black capacitor was odd looking because it was burned up! The cap in question was one of those multicolored plastic tantalum caps. These caps were used in a lot of places to decouple the voltage lines into the sub assemblies. Luckily, I had another mixer board and once I realized the part was fried, I swapped in the other board and have been fine ever since. As always, your mileage....

In a message dated 3/11/2013 4:22:16 P.M. Eastern Daylight Time, garygarlic@... writes:

Well, I'm finally getting back into my TR-7 that died months (perhaps 12 or more) ago.... the blown fuse was caused by a shorted 10-Volt pass regulator that was murdered by a dead short on the +10 buss. Fairly quickly narrowed it to the translator board, BUT: there's no short when the board is on extenders, no visible marks where things might have been touching the chassis. I even put a strip of masking tape between a shield cover and the connector where the +10 arrives. No joy. Next will be to solder-suck a couple of reachable components and perhaps +10 the pin on the socket that plugs onto the motherboard.
Any interesting war stories? Can't even use my lo-ohm shortsqueek finder down in the shielded compartment.

--
Gary Woods AKA K2AHC- PGP key on request, or at
home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

[Non-text portions of this message have been removed]

12507. Re: [DrakeRadio] My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 03:04:40 UTC
From: scpmiller@...
Topic: 12501 Message: 12507

My TR7 did this to me a month ago - like many others here I found that cleaning the pins and sockets on the cards located under the DR7 board fixed the problem. You'll need lots of patience to get the DR7 out, take off the cover over the cards that are under it and remove each card one at a time. Spray the Molex pins with De-Oxit, wipe clean, spray a tiny bit of De-Oxit into the socket the board mounts to, give it some time to evaporate, and then reinstall the card. I did the whole procedure over several nights but I am really slow.

Steve
KD2ed

In a message dated 3/11/2013 9:23:56 P.M. Eastern Daylight Time, kj6bso@... writes:

Hello, all—

My TR-7 recently developed a glitch: It works properly when I first turn it on but after about ten minutes, the tuned frequency will drop exactly 500 kHz. Once this has happened, pressing either the "UP" or "DOWN" keys, changes the frequency in 1 MHz increments rather than the normal 500 kHz step, although the LED display will flash the 500 kHz increment for a fraction of a second on the way past. A quick off-on power cycle doesn't eliminate the problem; letting it sit overnight does, which leads me to believe it's a thermal issue. I have not yet had the opportunity to test how long it needs to be powered down before it returns to normal operation.

Any ideas on why this is happening and how I might go about fixing it?

73,

Carl Maniscalco, KJ6BSO

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12508. Re: [DrakeRadio] My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 03:13:04 UTC
From: Don Cunningham
Topic: 12501 Message: 12508

Steve,

I would make one adjustment to your excellent procedure below. I would NEVER spray DeOxit anywhere around a circuit board. DeOxit is conductive, and if sprayed (or oversprayed) on a PC board it may well do more harm than good in the long run. I like the "needle applicator" bottles, or spray what you have in the cap on the can and use a toothpick to put very small amounts of DeOxit on pins and sockets.

I had to learn the hard way to "first do no harm" in my repairs, hi.
73,
Don, WB5HAK

----- Original Message -----
From: scpmiller@...
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 11, 2013 10:04 PM
Subject: Re: [DrakeRadio] My TR-7 changes frequency without my help.

My TR7 did this to me a month ago - like many others here I found that cleaning the pins and sockets on the cards located under the DR7 board fixed the problem. You'll need lots of patience to get the DR7 out, take off the cover over the cards that are under it and remove each card one at a time. Spray the Molex pins with De-Oxit, wipe clean, spray a tiny bit of De-Oxit into the socket the board mounts to, give it some time to evaporate, and then reinstall the card. I did the whole procedure over several nights but I am really slow.

Steve
KD2ed

In a message dated 3/11/2013 9:23:56 P.M. Eastern Daylight Time,
kj6bso@... writes:

Hello, all—

My TR-7 recently developed a glitch: It works properly when I first turn it on but after about ten minutes, the tuned frequency will drop exactly 500 kHz. Once this has happened, pressing either the "UP" or "DOWN" keys, changes the frequency in 1 MHz increments rather than the normal 500 kHz step, although the LED display will flash the 500 kHz increment for a fraction of a second on the way past. A quick off-on power cycle doesn't eliminate the problem; letting it sit overnight does, which leads me to believe it's a thermal issue. I have not yet had the opportunity to test how long it needs to be powered down before it returns to normal operation.

Any ideas on why this is happening and how I might go about fixing it?

73,

Carl Maniscalco, KJ6BSO

Yahoo! Groups Links

[Non-text portions of this message have been removed]

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2904 / Virus Database: 2641/6163 - Release Date: 03/10/13

[Non-text portions of this message have been removed]

12509. Re: [DrakeRadio] My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 05:23:52 UTC
From: Jim Shorney
Topic: 12501 Message: 12509

My opinion, don't spray DeOxit (or any other cleaner) ANYWHERE. It should be used sparingly, and only where needed. A spray will always go everywhere you don't want or need it. The only exceptions would be cleaners that evaporate competely, leaving no residue.

73

-Jim
NU0C

On Mon, 11 Mar 2013 22:13:04 -0500, Don Cunningham wrote:

>I would make one adjustment to your excellent procedure below. I would NEVER spray DeOxit anywhere around a circuit board.

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12510. T4XC PTO's interchangeable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 04:51:44 UTC
From: w6mqi
Topic: 12510 Message: 12510

I have a T4XC serial number 24049, and a 2nd T4XC serial number 23408. Are the PTO's interchangeable without any alignment or power issues? The reason I ask is unit 23408 seems to have what feels like a flat ball bearing on the main shaft. While turning the main knob there is a knock or bump coming from the ball bearing area on the main shaft. I have clean the whole unit and can't see any debris or damaged bearings so I'm ready to swap out the PTO with my working spare unit if possible.

73,Dave

12511. Re: [DrakeRadio] T4XC PTO's interchangeable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 08:54:09 UTC
From: vacuuminded2@...
Topic: 12510 Message: 12511

Maybe there's a nick or burr on the shaft as opposed to a flat ball?
Odds are you will have to do some minor alignment for the dial reading to be accurate if you swap them- there's a chance you might get lucky and they're almost exactly the same, but I would assume not and possibly be pleasantly surprised.
These rigs are pretty simple to align especially if you have an accurate frequency counter and/or sig gen, however if you really don't want to touch it maybe some more prodding is in order with the mechanics of your issue.
Otherwise, your spare PTO should be plug, er uh, solder and play.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Mar 11, 2013, at 11:51 PM, "w6mqi" <w6mqi@...> wrote:

> I have a T4XC serial number 24049, and a 2nd T4XC serial number 23408. Are the PTO's interchangeable without any alignment or power issues? The reason I ask is unit 23408 seems to have what feels like a flat ball bearing on the main shaft. While turning the main knob there is a knock or bump coming from the ball bearing area on the main shaft. I have clean the whole unit and can't see any debris or damaged bearings so I'm ready to swap out the PTO with my working spare unit if possible.
>
> 73,Dave
>
>

[Non-text portions of this message have been removed]

12512. Re: [DrakeRadio] T4XC PTO's interchangeable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 10:31:23 UTC
From: Steve Wedge
Topic: 12510 Message: 12512

I have found PTO's in the B-Line and earlier to be drop-in compatible. Since the C's are the same circuit with a different geartrain, I'll assume that this is true for them as well. If the dial needs adjustment, it is done simply by lifting the gear that's under spring tension up and moving the dial scale[s].

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w6mqi
Sent: Tuesday, March 12, 2013 12:51 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] T4XC PTO's interchangeable?

I have a T4XC serial number 24049, and a 2nd T4XC serial number 23408. Are the PTO's interchangeable without any alignment or power issues? The reason I ask is unit 23408 seems to have what feels like a flat ball bearing on the main shaft. While turning the main knob there is a knock or bump coming from the ball bearing area on the main shaft. I have clean the whole unit and can't see any debris or damaged bearings so I'm ready to swap out the PTO with my working spare unit if possible.

73,Dave

[Non-text portions of this message have been removed]

12513. VA3MGN's recent file upload

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 12:50:59 UTC
From: Terrell Hamilton
Topic: 12513 Message: 12513

I don't have a TR-4, but I really appreciated reading VA3MGN's recent file upload. If you haven't checked it out, take a quick look. There is experience shared in it that would be useful for any Drake owner, regardless of the model. Here's the title, found on the YahooGroup website: Upgrades, Troubleshooting and Alignment of TR-4 S/N 26104

By Matt Newman, VA3MGN/AA1VN

Thanks, Matt - great writing! You did a good job communicating the repair history of your TR-4.

73,

Terry K7WLD

Wenatchee, WA

[Non-text portions of this message have been removed]

12514. Re: [DrakeRadio] T4XC PTO's interchangeable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 14:26:22 UTC
From: Garey Barrell
Topic: 12510 Message: 12514

Dave -

The short answer is 'Yes'. I have documented at least 17 varieties of the 4 Line PTO, some due to
semiconductor (BJT or FET) and most due to iterations of the supply line decoupling. The basic
circuit though, is the same from the R-4A (the R-4 was a tube version) through the TR-7. The
TR-4CwRIT was the first to add RIT, using what had previously been the FSK terminal on the side just
behind the gearbox, through the TR-7. The only difference I am aware of was that they would select
the highest output PTOs and reserve them for the RV-4/Cs.

The mechanical differences for the A/B, C, and 7 are all different of course. Some have tried to
replace JUST the PC board and coil assembly, with varying degrees of success. I know of only a
couple of cases where the new assembly met the original linearity specifications. Aside from that,
the circuit seems to be relatively insensitive to component changes, other than the TC and padder
caps, marked with asterisks in the schematic. Thereis also some sensitivityto lead placement of the
internal wiring, but less than I expected.

All in all, pretty amazing performance from a utilitarian design.

As for your mechanical problem, I'd suspect a lump of hardened grease in the front ball bearing,
perhaps adhered to the wall of the bearing race. I don't believethat the shaft of the lead screw or
one of the balls could be damaged once assembled. This assembly is easily repairedby loosening the
set screw at the back end of the lead screw until the front bearings fall out. There are 10 steel
balls, 0.125"dia (ACE or True Value hardware stores), and a single one at the back end under the set
screw. Rather than swap, I'd recommend just repairing the existing PTO and returning it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> I have a T4XC serial number 24049, and a 2nd T4XC serial number 23408. Are the PTO's interchangeable without any alignment or power issues? The reason I ask is unit 23408 seems to have what feels like a flat ball bearing on the main shaft. While turning the main knob there is a knock or bump coming from the ball bearing area on the main shaft. I have clean the whole unit and can't see any debris or damaged bearings so I'm ready to swap out the PTO with my working spare unit if possible.
>
> 73,Dave
>
>

12515. Re: T4XC PTO's interchangeable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 14:32:33 UTC
From: w6mqi
Topic: 12510 Message: 12515

Hi Guys
Thanks for the info I figured they were compatible just wanted to make sure. I didn't know the B-line would work these are much nicer running gear trains. I find my b-line to be super smooth, and positive feeling, my C-line doesn't have the same feel.I don't think I would swap a B PTO into a C though I like the twin dials on the C-line.

73,Dave

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> I have found PTO's in the B-Line and earlier to be drop-in compatible. Since the C's are the same circuit with a different geartrain, I'll assume that this is true for them as well. If the dial needs adjustment, it is done simply by lifting the gear that's under spring tension up and moving the dial scale[s].
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: w6mqi
> Sent: Tuesday, March 12, 2013 12:51 AM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] T4XC PTO's interchangeable?
>
>
>
> I have a T4XC serial number 24049, and a 2nd T4XC serial number 23408. Are the PTO's interchangeable without any alignment or power issues? The reason I ask is unit 23408 seems to have what feels like a flat ball bearing on the main shaft. While turning the main knob there is a knock or bump coming from the ball bearing area on the main shaft. I have clean the whole unit and can't see any debris or damaged bearings so I'm ready to swap out the PTO with my working spare unit if possible.
>
> 73,Dave
>
>
>
>
>
> [Non-text portions of this message have been removed]

>

12516. Upgrades, Troubleshooting and Alignment of TR-4 26104

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 20:50:08 UTC
From: matt.newman10
Topic: 12516 Message: 12516

I want to thank Garey, K4OAH, for his ongoing encouragement and mentoring during the upgrading and alignment of TR-4 26104. With his help, and the help of the Group, my TR-4 is now in excellent working condition. I can now troubleshoot most problems with greater confidence.

I am the third owner of TR-4 26104 (version 3 of 8) produced in early 1967. Upgrades made by the first owner and myself moved the circuit into the 27000+ series. Also installed is a late version solid state AF preamp board consistent with 28500.

I first had a problem peaking RF TUNE on any band other than 40M. By following proper alignment procedure and, with the aid of the Drake Service Supplement CD, I not only solved the problem, but in the end achieved top overall RX/TX performance.

My report, "Upgrades, Troubleshooting and Alignment of TR-4 26104" has been uploaded to Files. It has been a great learning experience. Comments and criticisms are always welcome.

73,

Matt, VA3MGN/AA1VN

12517. enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 22:11:56 UTC
From: qrper
Topic: 12517 Message: 12517

boys and girls

I mentioned this in an another message about a custom cover for the Drake AC4.

I received two quotes from metal fabricators..

The case top will/might be made of .050 alumimun with a custom silk screen appled to one side.

it will be a drop in replacement with a 60mm fan to draw out hot air from the cabinet.

So my question to the group; is there enough interest to move a head with this project?

Here's the prices and subject to change

just the new cover without hardware or fans is $14.95
New cover with fans, fingerguard, and all new hardware is $24.95

Now i'm going to guess that most of you are saying out loud, "Cricky, that a lot for a piece of metal!"

and you're be right!

Quite frankly, I had figured a couple three buck for the piece. I was wrong.

That's why I'm posting this here. If I get the feeling from your feedback that it's too much, then I'll drop the idea.

on a side note, I've been working with the people that used to work for drake and have purchased the metal working machines. So, in a way the new cover would be made by drake.

so, there you have it. Pop me a note. Let me what you're thinking is on this. The project is not going to be a money maker, I'm doing this just because I like the old black radios.

later,

mike, wb8vge

12518. RE: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 22:22:10 UTC
From: Terrell Hamilton
Topic: 12517 Message: 12518

Mike, put me down on the interest list for two (2) - if there's enough interest, let me know where to send the $$.

73,

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of qrper
Sent: Tuesday, March 12, 2013 3:12 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] enhanced AC4 cooling case

boys and girls

I mentioned this in an another message about a custom cover for the Drake AC4.

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later,

mike, wb8vge

[Non-text portions of this message have been removed]

12519. R-4C: LSB heard at 14.008

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 22:24:49 UTC
From: Charles Ring
Topic: 12513 Message: 12519

Yesterday, I heard LSB voice on 14.008 and about 14.012 with my R-4C with all settings appropriate for that frequency. I also heard normal CW signals so the radio was working right. The voice signals were too weak for me to catch callsigns (I did hear them being given) but it sounded like normal USA ham conversations. What sort of image was I hearing?

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

12520. RE: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 22:25:02 UTC
From: Terrell Hamilton
Topic: 12517 Message: 12520

Mike - Oops! Forgot the email address - I had asked you to put me down for two covers.

Terry Hamilton K7WLD

Wenatchee, WA

hamilter@...

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of qrper
Sent: Tuesday, March 12, 2013 3:12 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] enhanced AC4 cooling case

boys and girls

I mentioned this in an another message about a custom cover for the Drake AC4.

I received two quotes from metal fabricators..

The case top will/might be made of .050 alumimun with a custom silk screen appled to one side.

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New cover with fans, fingerguard, and all new hardware is $24.95

Now i'm going to guess that most of you are saying out loud, "Cricky, that a lot for a piece of metal!"

and you're be right!

Quite frankly, I had figured a couple three buck for the piece. I was wrong.

That's why I'm posting this here. If I get the feeling from your feedback that it's too much, then I'll drop the idea.

on a side note, I've been working with the people that used to work for drake and have purchased the metal working machines. So, in a way the new cover would be made by drake.

so, there you have it. Pop me a note. Let me what you're thinking is on this. The project is not going to be a money maker, I'm doing this just because I like the old black radios.

later,

mike, wb8vge

[Non-text portions of this message have been removed]

12521. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 22:31:29 UTC
From: Mike
Topic: 12517 Message: 12521

Terry and all

I am not taking orders. I am just slipping a toe into the water.

I'll need to scare up a couple of grand to meet the initial run of 100 pcs.

I'd there is not enough interest, then I'll leave it die a slow agonizing death.

I thought of going to china, but damn I'd hate to do that.

I forgot to mention the fan will have some sort of electronics to operate them from the filament string.

Mike wb8bge

Sent from my iPhone

On Mar 12, 2013, at 6:25 PM, "Terrell Hamilton" <hamilter@...> wrote:

> Mike - Oops! Forgot the email address - I had asked you to put me down for
> two covers.
>
> Terry Hamilton K7WLD
>
> Wenatchee, WA
>
> hamilter@nwi.net
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@...m] On
> Behalf Of qrper
> Sent: Tuesday, March 12, 2013 3:12 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] enhanced AC4 cooling case
>
> boys and girls
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> I mentioned this in an another message about a custom cover for the Drake
> AC4.
>
> I received two quotes from metal fabricators..
>
> The case top will/might be made of .050 alumimun with a custom silk screen
> appled to one side.
>
> it will be a drop in replacement with a 60mm fan to draw out hot air from
> the cabinet.
>

> So my question to the group; is there enough interest to move a head with
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>
> Here's the prices and subject to change
>
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> lot for a piece of metal!"
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> Quite frankly, I had figured a couple three buck for the piece. I was wrong.
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> drake and have purchased the metal working machines. So, in a way the new
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> so, there you have it. Pop me a note. Let me what you're thinking is on
> this. The project is not going to be a money maker, I'm doing this just
> because I like the old black radios.
>
> later,
>
> mike, wb8vge
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12522. ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 23:11:09 UTC
From: slowcountry1
Topic: 12522 Message: 12522

While cleaning up my shack, I found an ElectroVoice 630 microphone that I acquired in a group of items from an estate sale. I am currently using an un-amplified D-104 with my TR-4Cw. The Electrovoice would be a nice exchange as it has a flexible stand and a foot switch.

I changed the pins for Hi-z and wired the unit to the mic plug. I am unable to get any audio out of the mic. I believe the mic element to be bad but want to make sure this is the case prior to throwing it aside. I disconnected the mic element wires from the on and off switch and ohm'd the element and it shows open. I switched the DMM to millivolts and whistled into the mic and did not produce a millivolt reading. Can someone verify for me that the element is dead?

Thanks,

Doug

12523. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 23:23:31 UTC
From: LAWRENCE MATHESON
Topic: 12517 Message: 12523

Mike,
I'd be interested in 4 of the covers.

Lawrence, WA4BHK

On 3/12/2013 6:11 PM, qrper wrote:
>
> boys and girls
>
> I mentioned this in an another message about a custom cover for the
> Drake AC4.
>
> I received two quotes from metal fabricators..
>
> The case top will/might be made of .050 alumimun with a custom silk
> screen appled to one side.
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> it will be a drop in replacement with a 60mm fan to draw out hot air
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> the new cover would be made by drake.
>
> so, there you have it. Pop me a note. Let me what you're thinking is
> on this. The project is not going to be a money maker, I'm doing this

> just because I like the old black radios.
>
> later,
>
> mike, wb8vge
>
>

[Non-text portions of this message have been removed]

12524. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 23:43:40 UTC
From: Charles Rodecap
Topic: 12517 Message: 12524

Would there be a way to adapt/retro fit this to an AC-3??

Charlie

--- On Tue, 3/12/13, LAWRENCE MATHESON <wa4bhk@...> wrote:

From: LAWRENCE MATHESON <wa4bhk@...>
Subject: Re: [DrakeRadio] enhanced AC4 cooling case
To: DrakeRadio@yahoogroups.com
Date: Tuesday, March 12, 2013, 7:23 PM

Mike,

I'd be interested in 4 of the covers.

Lawrence, WA4BHK

On 3/12/2013 6:11 PM, qrper wrote:

>

> boys and girls

>

> I mentioned this in an another message about a custom cover for the

> Drake AC4.

>

> I received two quotes from metal fabricators..

>

> The case top will/might be made of .050 alumimun with a custom silk

> screen appled to one side.

>

> it will be a drop in replacement with a 60mm fan to draw out hot air

> from the cabinet.

>

> So my question to the group; is there enough interest to move a head

> with this project?

>

> Here's the prices and subject to change

>

> just the new cover without hardware or fans is $14.95

> New cover with fans, fingerguard, and all new hardware is $24.95

>

> Now i'm going to guess that most of you are saying out loud, "Cricky,

> that a lot for a piece of metal!"

>

> and you're be right!

>

> Quite frankly, I had figured a couple three buck for the piece. I was

> wrong.

>

> That's why I'm posting this here. If I get the feeling from your

> feedback that it's too much, then I'll drop the idea.

>

> on a side note, I've been working with the people that used to work

> for drake and have purchased the metal working machines. So, in a way

> the new cover would be made by drake.

>

> so, there you have it. Pop me a note. Let me what you're thinking is

> on this. The project is not going to be a money maker, I'm doing this

> just because I like the old black radios.

>

> later,

>

> mike, wb8vge

>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12525. RE: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-12 23:57:48 UTC
From: Terrell Hamilton
Topic: 12517 Message: 12525

Heck, Mike, the darn thing only costs $25.00 for the deluxe edition, it seems like everyone with an AC4 would want one for however many AC4's they've got. A couple of years back, someone got a lot of interest in replica Drake LogBooks, and had a bunch published. I got 10, I think, so there's history of group buying here.

Don't go to China, I like the idea of using the old Drake fabricators...

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Mike
Sent: Tuesday, March 12, 2013 3:31 PM
To: DrakeRadio@yahoogroups.com
Cc: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] enhanced AC4 cooling case

Terry and all

I am not taking orders. I am just slipping a toe into the water.

I'll need to scare up a couple of grand to meet the initial run of 100 pcs.

I'd there is not enough interest, then I'll leave it die a slow agonizing death.

I thought of going to china, but damn I'd hate to do that.

I forgot to mention the fan will have some sort of electronics to operate them from the filament string.

Mike wb8bge

Sent from my iPhone

On Mar 12, 2013, at 6:25 PM, "Terrell Hamilton" <hamilter@... <mailto:hamilter%40nwi.net>
> wrote:

> Mike - Oops! Forgot the email address - I had asked you to put me down for
> two covers.
>
> Terry Hamilton K7WLD
>
> Wenatchee, WA
>
> hamilter@... <mailto:hamilter%40nwi.net>
>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On

> Behalf Of qrper
> Sent: Tuesday, March 12, 2013 3:12 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: [DrakeRadio] enhanced AC4 cooling case
>
> boys and girls
>
> I mentioned this in an another message about a custom cover for the Drake
> AC4.
>
> I received two quotes from metal fabricators..
>
> The case top will/might be made of .050 alumimun with a custom silk screen
> appled to one side.
>
> it will be a drop in replacement with a 60mm fan to draw out hot air from
> the cabinet.
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> So my question to the group; is there enough interest to move a head with
> this project?
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> New cover with fans, fingerguard, and all new hardware is $24.95
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> Now i'm going to guess that most of you are saying out loud, "Cricky, that a
> lot for a piece of metal!"
>
> and you're be right!
>
> Quite frankly, I had figured a couple three buck for the piece. I was wrong.
>
> That's why I'm posting this here. If I get the feeling from your feedback
> that it's too much, then I'll drop the idea.
>
> on a side note, I've been working with the people that used to work for
> drake and have purchased the metal working machines. So, in a way the new
> cover would be made by drake.
>
> so, there you have it. Pop me a note. Let me what you're thinking is on
> this. The project is not going to be a money maker, I'm doing this just
> because I like the old black radios.
>
> later,
>
> mike, wb8vge
>
> [Non-text portions of this message have been removed]
>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12526. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:07:38 UTC
From: Steve Garwood
Topic: 12517 Message: 12526

I'd take two of them..... It can't hurt to keep the power supply cooler. Plus it will end looking much better than anything that I could come up with!

Steve, N0CZV

Sent from my iPad

On Mar 12, 2013, at 6:11 PM, "qrper" <prosolar@...> wrote:

> boys and girls
>
> I mentioned this in an another message about a custom cover for the Drake AC4.
>
> I received two quotes from metal fabricators..
>
> The case top will/might be made of .050 alumimun with a custom silk screen appled to one side.
>
> it will be a drop in replacement with a 60mm fan to draw out hot air from the cabinet.
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> on a side note, I've been working with the people that used to work for drake and have purchased the metal working machines. So, in a way the new cover would be made by drake.
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> so, there you have it. Pop me a note. Let me what you're thinking is on this. The project is not going to be a money maker, I'm doing this just because I like the old black radios.
>
> later,
>
> mike, wb8vge

>
>

[Non-text portions of this message have been removed]

12527. Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:17:02 UTC
From: mike_ai6ii
Topic: 12522 Message: 12527

I can't help you with your question, Doug, but I am interested in any answer that comes your way. Turns out when cleaning out my office at the college (I retired in December) I too came across a EV 630 and want to use it with my Drake T-4XB. I don't have the connecting cable and need to find one that will fit the 3-pin socket. How is yours wired?

..mike AI6II

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
> While cleaning up my shack, I found an ElectroVoice 630 microphone that I acquired in a group of items from an estate sale. I am currently using an un-amplified D-104 with my TR-4Cw. The Electrovoice would be a nice exchange as it has a flexible stand and a foot switch.
>
> I changed the pins for Hi-z and wired the unit to the mic plug. I am unable to get any audio out of the mic. I believe the mic element to be bad but want to make sure this is the case prior to throwing it aside. I disconnected the mic element wires from the on and off switch and ohm'd the element and it shows open. I switched the DMM to millivolts and whistled into the mic and did not produce a millivolt reading. Can someone verify for me that the element is dead?
>
> Thanks,
>
> Doug
>

12528. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:49:57 UTC
From: W6IDS
Topic: 12517 Message: 12528

I want my power supply cooler for sure. I like my black radio too. . .

Howard W6IDS
Richmond, IN EM79NV

From: Steve Garwood
Sent: Tuesday, March 12, 2013 8:07 PM
To: DrakeRadio@yahoogroups.com
Cc: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enhanced AC4 cooling case

I'd take two of them..... It can't hurt to keep the power supply cooler. Plus it will end looking much better than anything that I could come up with!

Steve, N0CZV

Sent from my iPad

On Mar 12, 2013, at 6:11 PM, "qrper" <mailto:prosolar%40gmail.com> wrote:

> boys and girls
>
> I mentioned this in an another message about a custom cover for the Drake AC4.
>
> I received two quotes from metal fabricators..
>
> The case top will/might be made of .050 alumimun with a custom silk screen appled to one side.
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> it will be a drop in replacement with a 60mm fan to draw out hot air from the cabinet.
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> and you're be right!
>
> Quite frankly, I had figured a couple three buck for the piece. I was wrong.
>
> That's why I'm posting this here. If I get the feeling from your feedback that it's too much, then I'll drop the idea.

>
> on a side note, I've been working with the people that used to work for drake and have purchased the metal working machines. So, in a way the new cover would be made by drake.
>
> so, there you have it. Pop me a note. Let me what you're thinking is on this. The project is not going to be a money maker, I'm doing this just because I like the old black radios.
>
> later,
>
> mike, wb8vge

[Non-text portions of this message have been removed]

12529. Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:52:06 UTC
From: slowcountry1
Topic: 12522 Message: 12529

--- In DrakeRadio@yahoogroups.com, "mike_ai6ii" <ai6ii@...> wrote:
>
> I can't help you with your question, Doug, but I am interested in any answer that comes your way. Turns out when cleaning out my office at the college (I retired in December) I too came across a EV 630 and want to use it with my Drake T-4XB. I don't have the connecting cable and need to find one that will fit the 3-pin socket. How is yours wired?
>
> ..mike AI6II
>
> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> >
> > While cleaning up my shack, I found an ElectroVoice 630 microphone that I acquired in a group of items from an estate sale. I am currently using an un-amplified D-104 with my TR-4Cw. The Electrovoice would be a nice exchange as it has a flexible stand and a foot switch.
> >
> > I changed the pins for Hi-z and wired the unit to the mic plug. I am unable to get any audio out of the mic. I believe the mic element to be bad but want to make sure this is the case prior to throwing it aside. I disconnected the mic element wires from the on and off switch and ohm'd the element and it shows open. I switched the DMM to millivolts and whistled into the mic and did not produce a millivolt reading. Can someone verify for me that the element is dead?
> >
> > Thanks,
> >
> > Doug
> >
>
Mike

Mine has the four pin plug at the base of the mic head. It is mounted on a chrome flexable stand about 14" long. If you are missing the necessary connecting cable and such, assuming that someone verifies my "dead" element finding, you're welcome to this one. Assuming you have a good element in yours.

The main reason I wanted to use this one is that it would allow for hands free operation and would be the perfect height for me.

I have mine pinned for high Z. A quick google search produces a PDF manual for the mic. I'm sure this one is dead, I was just hoping someone would have an idea how to reassurect the element. There are no obvious coil wire problems. I checked all solder joints etc. I even "touched" up the solder joints on the element itself.

12530. Is DeOxit really conductive? Maker says no.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:57:03 UTC
From: k9sqg
Topic: 12530 Message: 12530

DeoxIT® is NOT conductive, however, phenolic is composed of multiple layers of material and readily absorbs liquid. As a result, any product that contains a conductive material should not be used. Most manufactures include alcohol in their contact cleaners, lubricants and preservatives (even very small percentages), and alcohol will cause short circuits.

DeoxIT®, DeoxIT® GOLD, DeoxIT® SHIELD, DeoxIT® FaderLube liquids are completely non-conductive, and neither the 100% liquids or the 5% spray versions contain alcohol or any other conductive constituents.

Warnings should be issued cautioning technicians from using any contact cleaners containing alcohol. This is one of the most common misuses of contact cleaners.

Also, the use of silicone in any type of contact cleaning solutions should be avoided because it can be detrimental to the long-term performance of the contact or switch because it will degrade phenolics and plastics over time.

DeoxIT ® is used for many applications including telephone switching systems that contain phenolic materials. Care should be taken to reduce exposure of any materials, including DeoxIT ® to phenolic materials due to its porosity.

Even superior phenolics over long periods of time degrade, and thereby more easily absorb any materials, whether it be DeoxIT ® or any other product. To prevent this from happening, we offer many applicators to assist the technician in applying our products to the metal surfaces directly without concern with over-spray on to the phenolic materials.

If a spray version is required due to inaccessibility of a contact area, we recommend our DeoxIT ® (D100S-2) 100% spray, which contains no solvent. This version reduces potential over-spray by confining the product to a controlled area without migration of solvent.

The DeoxIT ® 100% solution is safe for use on energized circuits, as is our new non-flammable DeoxIT ® DN5 (DN5MS-15) spray.

Our most popular DeoxIT ® D5 (D5S-6; flush - slow dry) is not recommended for energized circuits due to the fact that it contains a flammable solvent. We always recommend turning equipment off prior to application, and waiting two minutes before turning the equipment back on.

This caution is due to the brief flammability of the solvent, not the conductivity of the solvent. If the energized system arcs, it could cause a flash, thus causing damage to relay contacts, power contacts, commutators, etc.

Finally, DeoxIT ® spray is not recommended for rosin flux removal.

12531. RE: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 00:57:37 UTC
From: Rich Arland
Topic: 12517 Message: 12531

Put me down for one and provided I find another AC-4 at Dayton I will order a 2nd, Mike.

You 'da MAN, man!

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

CC: DrakeRadio@yahoogroups.com
To: DrakeRadio@yahoogroups.com
From: prosolar@...
Date: Tue, 12 Mar 2013 18:31:29 -0400
Subject: Re: [DrakeRadio] enhanced AC4 cooling case

Terry and all

I am not taking orders. I am just slipping a toe into the water.

I'll need to scare up a couple of grand to meet the initial run of 100 pcs.

I'd there is not enough interest, then I'll leave it die a slow agonizing death.

I thought of going to china, but damn I'd hate to do that.

I forgot to mention the fan will have some sort of electronics to operate them from the filament string.

Mike wb8bge

Sent from my iPhone

On Mar 12, 2013, at 6:25 PM, "Terrell Hamilton" <hamilter@...> wrote:

> Mike - Oops! Forgot the email address - I had asked you to put me down for

> two covers.

>

> Terry Hamilton K7WLD

>

> Wenatchee, WA

>

> hamilter@...

>

> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On

> Behalf Of qrper

> Sent: Tuesday, March 12, 2013 3:12 PM

> To: DrakeRadio@yahoogroups.com

> Subject: [DrakeRadio] enhanced AC4 cooling case

>

> boys and girls

>

> I mentioned this in an another message about a custom cover for the Drake

> AC4.

>

> I received two quotes from metal fabricators..

>

> The case top will/might be made of .050 alumimun with a custom silk screen

> appled to one side.

>

> it will be a drop in replacement with a 60mm fan to draw out hot air from

> the cabinet.

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> Now i'm going to guess that most of you are saying out loud, "Cricky, that a

> lot for a piece of metal!"

>

> and you're be right!

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> Quite frankly, I had figured a couple three buck for the piece. I was wrong.

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> That's why I'm posting this here. If I get the feeling from your feedback

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>

> on a side note, I've been working with the people that used to work for

> drake and have purchased the metal working machines. So, in a way the new

> cover would be made by drake.

>

> so, there you have it. Pop me a note. Let me what you're thinking is on

> this. The project is not going to be a money maker, I'm doing this just

> because I like the old black radios.

>

> later,

>

> mike, wb8vge

>

> [Non-text portions of this message have been removed]

>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12532. Re: [DrakeRadio] ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:00:49 UTC
From: Richard Knoppow
Topic: 12522 Message: 12532

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 12, 2013 4:11 PM
Subject: [DrakeRadio] ElectroVoice 630 and TR-4C

> While cleaning up my shack, I found an ElectroVoice 630
> microphone that I acquired in a group of items from an
> estate sale. I am currently using an un-amplified D-104
> with my TR-4Cw. The Electrovoice would be a nice exchange
> as it has a flexible stand and a foot switch.
>
> I changed the pins for Hi-z and wired the unit to the mic
> plug. I am unable to get any audio out of the mic. I
> believe the mic element to be bad but want to make sure
> this is the case prior to throwing it aside. I
> disconnected the mic element wires from the on and off
> switch and ohm'd the element and it shows open. I
> switched the DMM to millivolts and whistled into the mic
> and did not produce a millivolt reading. Can someone
> verify for me that the element is dead?
>
> Thanks,
>
> Doug
>

Data sheets may be found at:
www.electrovoice.com/downloadfile.php?i=970567

and www.coutant.org/ev630/index.html

Make sure you know what you are measuring. To check the element you will have to open the head. I have an EV 635 which is similar, the head has two screws in it which release the front part. You will find the wiring to the element there and can measure directly across it. The VOM will not hurt it. Also remove the switch and check the wiring there to make sure there is not an open. The switch shorts the element.
For high impedance there is a transformer, it may have an open winding or bad wiring. My 635 is intermittant because a couple of the wires between the transformer and switch have are broken inside the insulation. Not easy to fix because of the construction.
The 630 is the same as the 635 but the elements in the 635 were selected to have somewhat more extended high

frequency response. The 635 is also only low impedance.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12533. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:05:08 UTC
From: Richard Knoppow
Topic: 12522 Message: 12533

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 12, 2013 5:52 PM
Subject: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

> Mine has the four pin plug at the base of the mic head. It
> is mounted on a chrome flexable stand about 14" long. If
> you are missing the necessary connecting cable and such,
> assuming that someone verifies my "dead" element finding,
> you're welcome to this one. Assuming you have a good
> element in yours.
>
> The main reason I wanted to use this one is that it would
> allow for hands free operation and would be the perfect
> height for me.
>
> I have mine pinned for high Z. A quick google search
> produces a PDF manual for the mic. I'm sure this one is
> dead, I was just hoping someone would have an idea how to
> reassurect the element. There are no obvious coil wire
> problems. I checked all solder joints etc. I even
> "touched" up the solder joints on the element itself.
>

I have run across a couple of instances where the wire
from the voice coil was broken where it is brought out
across the diaphragm. Not much you can do about this. I
had one old EV broadcast lavaliere mic where the voice coil
leads had just rotted away. Mostly, these are very rugged
mics and the plastic diaphragms are indestructible but
wiring problems seem to be fairly common.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12534. Re: [DrakeRadio] ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:06:17 UTC
From: Paul Kraemer
Topic: 12522 Message: 12534

NEVER check a mic with an ohm meter. Not a good practice
Those are very fine windings on the voice coil and if it is crystal or
ceramic element that can also be damaged
ALWAYS use a scope and observe the pattern and amplitude
Paul K0UYA
----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 12, 2013 6:11 PM
Subject: [DrakeRadio] ElectroVoice 630 and TR-4C

> While cleaning up my shack, I found an ElectroVoice 630 microphone that I
> acquired in a group of items from an estate sale. I am currently using an
> un-amplified D-104 with my TR-4Cw. The Electrovoice would be a nice
> exchange as it has a flexible stand and a foot switch.
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> the element and it shows open. I switched the DMM to millivolts and
> whistled into the mic and did not produce a millivolt reading. Can someone
> verify for me that the element is dead?
>
> Thanks,
>
> Doug
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

12535. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:10:14 UTC
From: Mike
Topic: 12517 Message: 12535

Sorry to say, but that won't work. Different footprint.

Mike wb8vge

Sent from my iPhone

On Mar 12, 2013, at 7:43 PM, Charles Rodecap <millwrightmonkey@...> wrote:

> Would there be a way to adapt/retro fit this to an AC-3??
>
> Charlie
>
> --- On Tue, 3/12/13, LAWRENCE MATHESON <wa4bhk@bellsouth.net> wrote:
>
> From: LAWRENCE MATHESON <wa4bhk@...>
> Subject: Re: [DrakeRadio] enhanced AC4 cooling case
> To: DrakeRadio@yahoogroups.com
> Date: Tuesday, March 12, 2013, 7:23 PM
>
>
>
> Mike,
>
> I'd be interested in 4 of the covers.
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> Lawrence, WA4BHK
>
> On 3/12/2013 6:11 PM, qrper wrote:
>
> >
>
> > boys and girls
>
> >
>
> > I mentioned this in an another message about a custom cover for the
>
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>
> >
>
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> > The case top will/might be made of .050 alumimun with a custom silk

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>
> > it will be a drop in replacement with a 60mm fan to draw out hot air
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> >
>
> > So my question to the group; is there enough interest to move a head
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> > just the new cover without hardware or fans is $14.95
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> > Now i'm going to guess that most of you are saying out loud, "Cricky,
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> > that a lot for a piece of metal!"
>
> >
>
> > and you're be right!
>
> >
>
> > Quite frankly, I had figured a couple three buck for the piece. I was
>
> > wrong.
>
> >
>
> > That's why I'm posting this here. If I get the feeling from your
>
> > feedback that it's too much, then I'll drop the idea.
>
> >
>
> > on a side note, I've been working with the people that used to work

>
> > for drake and have purchased the metal working machines. So, in a way
>
> > the new cover would be made by drake.
>
> >
>
> > so, there you have it. Pop me a note. Let me what you're thinking is
>
> > on this. The project is not going to be a money maker, I'm doing this
>
> > just because I like the old black radios.
>
> >
>
> > later,
>
> >
>
> > mike, wb8vge
>
> >
>
> >
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12536. Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:11:11 UTC
From: slowcountry1
Topic: 12522 Message: 12536

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, March 12, 2013 5:52 PM
> Subject: [DrakeRadio] Re: ElectroVoice 630 and TR-4C
> >
> > Mine has the four pin plug at the base of the mic head. It
> > is mounted on a chrome flexable stand about 14" long. If
> > you are missing the necessary connecting cable and such,
> > assuming that someone verifies my "dead" element finding,
> > you're welcome to this one. Assuming you have a good
> > element in yours.
> >
> > The main reason I wanted to use this one is that it would
> > allow for hands free operation and would be the perfect
> > height for me.
> >
> > I have mine pinned for high Z. A quick google search
> > produces a PDF manual for the mic. I'm sure this one is
> > dead, I was just hoping someone would have an idea how to
> > reassurect the element. There are no obvious coil wire
> > problems. I checked all solder joints etc. I even
> > "touched" up the solder joints on the element itself.
> >
>
> I have run across a couple of instances where the wire
> from the voice coil was broken where it is brought out
> across the diaphragm. Not much you can do about this. I
> had one old EV broadcast lavaliere mic where the voice coil
> leads had just rotted away. Mostly, these are very rugged
> mics and the plastic diaphragms are indestructible but
> wiring problems seem to be fairly common.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Richard,

I checked every one of those points. I also removed the head and pulled out the element. I quickly unsoldered the element from the red and green connection leads. The element shows open when ohm'd. Connecting for a millivolt reading the meter shows no response to a whistle. These were the last to checks that I made.

So, I'm assuming my "dead element" assumption was correct.

12537. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 01:15:47 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 12537

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /EV-630/630.pdf
Uploaded by : radiomanradioman <radiomanl@...>
Description : data sheet

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/EV-630/630.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

radiomanradioman <radiomanl@...>

12538. My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:08:13 UTC
From: Howard Traxler
Topic: 12538 Message: 12538

Hi all,
after this long time, I'm finally getting at my TR-4. One day it just stopped receiving. What I can hear yet is a hum and very faint rushing sound from the speaker. The sound is affected slightly by the AF volume control. A light click in the speaker occurs when switching between CAL, TUN, SSB, and AM. There is a noise like the relay clicking when I key the mic or key jack. All the tubes outside the final cage (that I can find) are at least warm to the touch.

I'm thinking of listening for local oscilators on a separate radio--if I knew where to listen; or of injecting signals of various types into different stages starting at the receive audio and moving back.

Would anyone have some suggestions or specific instructions for me? I hope I don't have to send her away for repair. Thank you anybody.

73,
Howard, WA9RYF

[Non-text portions of this message have been removed]

12539. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:12:25 UTC
From: Don Cunningham
Topic: 12538 Message: 12539

Howard,

Something I am ALWAYS doing if I ever move my TR4C is move the switch on the side from transceive to run the external receiver. That would be worth a look until Garey shows up, hi. Even have found a couple of defective switches there over the years.

Also, check the #12 lamp (receiver protector). Can be the bulb or corroded connections in the socket.

Hope these tips help.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12540. Re: [DrakeRadio] Is DeOxit really conductive? Maker says no.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:21:50 UTC
From: Garey Barrell
Topic: 12530 Message: 12540

Evan -

No DeoxIT is NOT conductive itself. It DOES however leave a lubricant, which attracts and holds
dust, which may carbonize and form conductive paths.

Spray cleaners, unless they are one of a few 'zero residue' types, should never be sprayed on
electronics!

Alcohol isn't great, because it holds water which CAN absorb into 'some' phenolic material.

Lot's of 'may', 'can', 'might', 'could', etc.!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k9sqg wrote:
> DeoxIT? is NOT conductive, however, phenolic is composed of multiple layers of material and readily absorbs liquid. As a result, any product that contains a conductive material should not be used. Most manufactures include alcohol in their contact cleaners, lubricants and preservatives (even very small percentages), and alcohol will cause short circuits.
>
> DeoxIT?, DeoxIT? GOLD, DeoxIT? SHIELD, DeoxIT? FaderLube liquids are completely non-conductive, and neither the 100% liquids or the 5% spray versions contain alcohol or any other conductive constituents.
>
> Warnings should be issued cautioning technicians from using any contact cleaners containing alcohol. This is one of the most common misuses of contact cleaners.
>
>

12541. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:32:12 UTC
From: Garey Barrell
Topic: 12538 Message: 12541

Howard -

Check the slide switch on the left hand side. It MUST be switched toward the front of the radio.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Hi all,
> after this long time, I'm finally getting at my TR-4. One day it just stopped receiving. What I can hear yet is a hum and very faint rushing sound from the speaker. The sound is affected slightly by the AF volume control. A light click in the speaker occurs when switching between CAL, TUN, SSB, and AM. There is a noise like the relay clicking when I key the mic or key jack. All the tubes outside the final cage (that I can find) are at least warm to the touch.
>
> I'm thinking of listening for local oscilators on a separate radio--if I knew where to listen; or of injecting signals of various types into different stages starting at the receive audio and moving back.
>
> Would anyone have some suggestions or specific instructions for me? I hope I don't have to send her away for repair. Thank you anybody.
>
> 73,
> Howard, WA9RYF
>

12542. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:46:33 UTC
From: Howard Traxler
Topic: 12538 Message: 12542

Thanks Garey, I thought so, but I tried the switch in both positions
73, Howard----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, March 12, 2013 9:32 PM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

Check the slide switch on the left hand side. It MUST be switched toward the front of the radio.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Hi all,
> after this long time, I'm finally getting at my TR-4. One day it just stopped receiving. What I can hear yet is a hum and very faint rushing sound from the speaker. The sound is affected slightly by the AF volume control. A light click in the speaker occurs when switching between CAL, TUN, SSB, and AM. There is a noise like the relay clicking when I key the mic or key jack. All the tubes outside the final cage (that I can find) are at least warm to the touch.
>
> I'm thinking of listening for local oscilators on a separate radio--if I knew where to listen; or of injecting signals of various types into different stages starting at the receive audio and moving back.
>
> Would anyone have some suggestions or specific instructions for me? I hope I don't have to send her away for repair. Thank you anybody.
>
> 73,
> Howard, WA9RYF
>

[Non-text portions of this message have been removed]

12543. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:52:50 UTC
From: Howard Traxler
Topic: 12538 Message: 12543

Thanks Don, I've tried the switch, but where will I find this #12 protector lamp? By the way, please describe as though you were blindfolded. I'm not here often enough for folks to remember: I'm sort of working with my eyes tied behind my back, hi hi.
73, Howard

----- Original Message -----
From: Don Cunningham
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, March 12, 2013 9:12 PM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard,

Something I am ALWAYS doing if I ever move my TR4C is move the switch on the side from transceive to run the external receiver. That would be worth a look until Garey shows up, hi. Even have found a couple of defective switches there over the years.

Also, check the #12 lamp (receiver protector). Can be the bulb or corroded connections in the socket.

Hope these tips help.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12544. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 02:56:20 UTC
From: Don Cunningham
Topic: 12538 Message: 12544

Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
73,
Don

[Non-text portions of this message have been removed]

12545. Re: [DrakeRadio] ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 03:37:04 UTC
From: Jim Shorney
Topic: 12522 Message: 12545

That may have been true with the older VOMs, but with modern digital
mutlimeters it is not an issue.

73

-Jim
NU0C

On Tue, 12 Mar 2013 20:06:17 -0500, Paul Kraemer wrote:

>NEVER check a mic with an ohm meter. Not a good practice
>Those are very fine windings on the voice coil and if it is crystal or
>ceramic element that can also be damaged
>ALWAYS use a scope and observe the pattern and amplitude

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12546. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 03:42:07 UTC
From: Jim Shorney
Topic: 12522 Message: 12546

On Wed, 13 Mar 2013 01:11:11 -0000, slowcountry1 wrote:

>I checked every one of those points. I also removed the head and pulled out the element. I quickly unsoldered the element from the red and green connection leads. The element shows open when ohm'd. Connecting for a millivolt reading the meter shows no response to a whistle. These were the last to checks that I made.
>
>So, I'm assuming my "dead element" assumption was correct.

Probably. I would examine the solder points with a magnifier, the magnet wire is weakest where it joins the solder. You may have a break there that can be patched.

I know someone who may be able to repair it of you are so inclined, he used to do factory repair for ElectroVoice and is a vintage mic afficionado. He's quite skilled at refurbishing vintage pro-audio mics. Otherwise, you could put a more modern element in the housing. If nothing else, there are collectors out there who would give you $$ for the dead mic.

The 630, being a dynamic mic, would be less "crisp" than the D-104, but should sound very natural. It will have some "proximity effect",
an increase in bass response as you speak closer to the mic.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12547. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 03:47:13 UTC
From: Jim Shorney
Topic: 12517 Message: 12547

On Tue, 12 Mar 2013 22:11:56 -0000, qrper wrote:

>Now i'm going to guess that most of you are saying out loud, "Cricky, that a lot for a piece of metal!"

Not at all, considering the work. I would be interested in two of the "bare bones" version.

73

-Jim
NU0C

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

12548. Re: My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 03:12:06 UTC
From: Carl Maniscalco
Topic: 12501 Message: 12548

Okay, thank you for your advice. I'll try the fix this weekend and get back to the group to let you know how it turns out.

73,

Carl, KJ6BSO

My TR7 did this to me a month ago - like many others here I found that cleaning the pins and sockets on the cards located under the DR7 board fixed the problem. You'll need lots of patience to get the DR7 out, take off the cover over the cards that are under it and remove each card one at a time. Spray the Molex pins with De-Oxit, wipe clean, spray a tiny bit of De-Oxit into the socket the board mounts to, give it some time to evaporate, and then reinstall the card. I did the whole procedure over several nights but I am really slow.

Steve
KD2ed

In a message dated 3/11/2013 9:23:56 P.M. Eastern Daylight Time, kj6bso@... writes:

Hello, all--

My TR-7 recently developed a glitch: It works properly when I first turn it on but after about ten minutes, the tuned frequency will drop exactly 500 kHz. Once this has happened, pressing either the "UP" or "DOWN" keys, changes the frequency in 1 MHz increments rather than the normal 500 kHz step, although the LED display will flash the 500 kHz increment for a fraction of a second on the way past. A quick off-on power cycle doesn't eliminate the problem; letting it sit overnight does, which leads me to believe it's a thermal issue. I have not yet had the opportunity to test how long it needs to be powered down before it returns to normal operation.

Any ideas on why this is happening and how I might go about fixing it?

73,

Carl Maniscalco, KJ6BSO

12549. greasy residual in between the dials on TR7 ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 04:18:18 UTC
From: ka8asn
Topic: 12549 Message: 12549

Any suggestions on how to remove a greasy residual in between the dials of the vfo without disassembly. The old hard grease melted when I applied a small amount of Deoxit on the shaft.I do not want to destroy any of the ink on the dials.

Any suggestions?

Mike T

12550. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 05:39:42 UTC
From: Richard Knoppow
Topic: 12522 Message: 12550

>>
> Richard,
>
> I checked every one of those points. I also removed the
> head and pulled out the element. I quickly unsoldered the
> element from the red and green connection leads. The
> element shows open when ohm'd. Connecting for a millivolt
> reading the meter shows no response to a whistle. These
> were the last to checks that I made.
>
> So, I'm assuming my "dead element" assumption was correct.
>
Well, I think you are right. Did you look at the voice
coil leads at the terminals of the capsule. It sounds as
though you did. Sometimes the leads come loose from the
terminals so its worth inspecting this closely. One would
expect that resoldering the wires from the body of the mic
would also resolder these but perhaps not. Anyway, you
can't loose anything by looking.
Its possible the voice coil opened up or was burned out
by an application of a lot of power but the coils are a lot
more rugged than you would think.
I just hate to give up on things and these are pretty
good microphones.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12551. Re: [DrakeRadio] greasy residual in between the dials on TR7 ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 08:26:23 UTC
From: vacuuminded2@...
Topic: 12549 Message: 12551

Freon TF. If you can find any, and that's a BIG "if" thanks to the environmental so-and-so's. Used to be the industry standard. Good luck getting all the grease out of there without disassembly or damage otherwise-

GL
Chris

Sent from my outdated iPhone wireless thingy

On Mar 12, 2013, at 11:18 PM, "ka8asn" <mtruss8841@...> wrote:

> Any suggestions on how to remove a greasy residual in between the dials of the vfo without disassembly. The old hard grease melted when I applied a small amount of Deoxit on the shaft.I do not want to destroy any of the ink on the dials.
>
> Any suggestions?
>
> Mike T
>
>

[Non-text portions of this message have been removed]

12552. Re: [DrakeRadio] ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 13:16:08 UTC
From: Paul Kraemer
Topic: 12522 Message: 12552

I doubt it is an issue either but when someone says VOM I have to assume the worst and would rather advise on the side of caution than have someone come back saying my advice hurt something
Scope is best, VTVM or solid state equivalent also ok, or even a audio amp sitting on bench as a test device
Paul K0UYA
----- Original Message -----
From: "Jim Shorney" <jshorney@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 12, 2013 10:37 PM
Subject: Re: [DrakeRadio] ElectroVoice 630 and TR-4C

>
> That may have been true with the older VOMs, but with modern digital
> mutlimeters it is not an issue.
>
> 73
>
> -Jim
> NU0C
>
> On Tue, 12 Mar 2013 20:06:17 -0500, Paul Kraemer wrote:
>
>>NEVER check a mic with an ohm meter. Not a good practice
>>Those are very fine windings on the voice coil and if it is crystal or
>>ceramic element that can also be damaged
>>ALWAYS use a scope and observe the pattern and amplitude
>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
> GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and
> he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>
>
>

> ------------------------------------
>
> Yahoo! Groups Links
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>
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12553. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 13:20:01 UTC
From: Howard Traxler
Topic: 12538 Message: 12553

Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.

73,
Howard
----- Original Message -----
From: Don Cunningham
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, March 12, 2013 9:56 PM
Subject: Re: [DrakeRadio] My non-working TR-4

Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
73,
Don

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12554. Re: [DrakeRadio] enhanced AC4 cooling case

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 14:31:35 UTC
From: Chuck Pool
Topic: 12517 Message: 12554

Hi Mike,

I am interested.

Chuck

From: Mike <prosolar@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Cc: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 12, 2013 9:10 PM
Subject: Re: [DrakeRadio] enhanced AC4 cooling case

Sorry to say, but that won't work. Different footprint.

Mike wb8vge

Sent from my iPhone

On Mar 12, 2013, at 7:43 PM, Charles Rodecap <millwrightmonkey@...> wrote:

> Would there be a way to adapt/retro fit this to an AC-3??
>
> Charlie
>
> --- On Tue, 3/12/13, LAWRENCE MATHESON <wa4bhk@...> wrote:
>
> From: LAWRENCE MATHESON <wa4bhk@...>
> Subject: Re: [DrakeRadio] enhanced AC4 cooling case
> To: DrakeRadio@yahoogroups.com
> Date: Tuesday, March 12, 2013, 7:23 PM
>
>
>
> Mike,
>
> I'd be interested in 4 of the covers.
>
> Lawrence, WA4BHK
>
> On 3/12/2013 6:11 PM, qrper wrote:
>
> > >
>
> > > boys and girls
>
> > >

>
> > I mentioned this in an another message about a custom cover for the
>
> > Drake AC4.
>
> >
>
> > I received two quotes from metal fabricators..
>
> >
>
> > The case top will/might be made of .050 alumimun with a custom silk
>
> > screen appled to one side.
>
> >
>
> > it will be a drop in replacement with a 60mm fan to draw out hot air
>
> > from the cabinet.
>
> >
>
> > So my question to the group; is there enough interest to move a head
>
> > with this project?
>
> >
>
> > Here's the prices and subject to change
>
> >
>
> > just the new cover without hardware or fans is $14.95
>
> > New cover with fans, fingerguard, and all new hardware is $24.95
>
> >
>
> > Now i'm going to guess that most of you are saying out loud, "Cricky,
>
> > that a lot for a piece of metal!"
>
> >
>
> > and you're be right!
>
> >
>
> > Quite frankly, I had figured a couple three buck for the piece. I was

>
> > wrong.
>
> >
>
> > That's why I'm posting this here. If I get the feeling from your
>
> > feedback that it's too much, then I'll drop the idea.
>
> >
>
> > on a side note, I've been working with the people that used to work
>
> > for drake and have purchased the metal working machines. So, in a way
>
> > the new cover would be made by drake.
>
> >
>
> > so, there you have it. Pop me a note. Let me what you're thinking is
>
> > on this. The project is not going to be a money maker, I'm doing this
>
> > just because I like the old black radios.
>
> >
>
> > later,
>
> >
>
> > mike, wb8vge
>
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>
> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12555. 39.1 MHz Crystal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 14:48:16 UTC
From: Al
Topic: 12555 Message: 12555

I was wondering if anyone has a 39.1 MHz crystal they are willing to part with at a reasonable price.
My R-4A only has a crystal for the 28.5 to 29.0 MHz part of the 10 meter band. I would like to receive on 28.0 to 28.5, which has much more activity.

Thanks,
Al, WA2S

12556. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 14:55:53 UTC
From: Don Cunningham
Topic: 12538 Message: 12556

Howard,

I am NOT the "guru" here, just trying to help when it looked like no one was answering you. The TR4 was really considered to be a nice mobile rig in its time, and the KW plus CB rig was just as common. The bulb was to protect the receiver front end from heavy RF. I think I remember Garey saying it has the properties of the #47 lamp, but don't quote me on that. I don't think it would hurt to bypass the lamp to test, but I would replace it when you can.

I'll bow out and return to my cave.
73,
Don, WB5HAK

[Non-text portions of this message have been removed]

12557. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 14:57:07 UTC
From: Garey Barrell
Topic: 12538 Message: 12557

Howard -

That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
#47 bulb, just with a bi-pin base.

Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
problem if that is the cause.

You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
rigs with ALL connected to their own antenna, the bulb isn't necessary.

I assume it wasn't the slide switch on the side.?

Do you have PA idle current when PTT is closed?

Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
times. Not the PA tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.
>
> 73,
> Howard
> ----- Original Message -----
> From: Don Cunningham
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, March 12, 2013 9:56 PM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>

>
> Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
> 73,
> Don
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12558. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 15:31:58 UTC
From: Howard Traxler
Topic: 12538 Message: 12558

Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.

Are the three finals the only tubes in the final cage?

It's hard to physically check all the tubes. There are so many I get confused.

Would that protection bulb be inside the cage with the finals?

What frequency can I listen to to hear local oscilators from the receiver?

These answers will give me something to do a while. Thanks to you and Don.

73, WA9RYF
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, March 13, 2013 9:57 AM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
#47 bulb, just with a bi-pin base.

Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
problem if that is the cause.

You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
rigs with ALL connected to their own antenna, the bulb isn't necessary.

I assume it wasn't the slide switch on the side.?

Do you have PA idle current when PTT is closed?

Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
times. Not the PA tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Howard Traxler wrote:
> Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.
>
> 73,
> Howard
> ----- Original Message -----
> From: Don Cunningham
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, March 12, 2013 9:56 PM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
> 73,
> Don
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12559. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 15:34:51 UTC
From: Howard Traxler
Topic: 12538 Message: 12559

P.S. It is drawing current. I have indication that the receiver's audio output is working; I did adjust the bias. I get relay noise when I short the key or PTT jacks.

<<<Do it all at onced next time, huh!>>>

WA9RYF
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, March 13, 2013 9:57 AM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
#47 bulb, just with a bi-pin base.

Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
problem if that is the cause.

You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
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times. Not the PA tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
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just twist the wires together, hi hi.
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> 73,
> Howard
> ----- Original Message -----
> From: Don Cunningham
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, March 12, 2013 9:56 PM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
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> 73,
> Don
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> [Non-text portions of this message have been removed]
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12560. Crystals wanted for 17 meters (and 60 meters?)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 15:51:05 UTC
From: Charles Ring
Topic: 12555 Message: 12560

Looking for a 29.1 MHz crystal to cover 18.0 to 18.5 MHz on my R-4B and R-4C. I was lucky to already have crystals to cover 30 and 12 meters.

Also, I'd like to know what to expect if I find and use a 16.1 MHz crystal for 5.0-5.5 MHz to cover the 60 meter channels. I know don't try to transmit with the 4 line there.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

12561. Re: [DrakeRadio] Crystals wanted for 17 meters (and 60 meters?)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 16:42:36 UTC
From: Richard Knoppow
Topic: 12555 Message: 12561

----- Original Message -----
From: "Charles Ring" <w3nu@...>
To: <DrakeRadio@yahoogroups.com>; <DrakeList@...>
Sent: Wednesday, March 13, 2013 8:51 AM
Subject: [DrakeRadio] Crystals wanted for 17 meters (and 60 meters?)

> Looking for a 29.1 MHz crystal to cover 18.0 to 18.5 MHz
> on my R-4B and
> R-4C. I was lucky to already have crystals to cover 30 and
> 12 meters.
>
> Also, I'd like to know what to expect if I find and use a
> 16.1 MHz
> crystal for 5.0-5.5 MHz to cover the 60 meter channels. I
> know don't try
> to transmit with the 4 line there.
>
I recently bought a set of warc band crystals for my R4B from International Crystal. They know all the constants. The required frequencies are in the handbook. They were about $20 each. I don't have a 60 meter crystal since that does not appear to be a useful band. I think its in the "forbidden" range of the RX due to being close to one of the IF frequencies. I suspect it will receive there but may have too many spurious responses. For the WARC bands I use the transceive function with the receiver controlling the T4XB frequency. The 30 meter crystal also gets me WWV so I can check the calibrator directly.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12562. Re: [DrakeRadio] Crystals wanted for 17 meters (and 60 meters?)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 16:46:42 UTC
From: Richard Knoppow
Topic: 12555 Message: 12562

----- Original Message -----
From: "Charles Ring" <w3nu@...>
To: <DrakeRadio@yahoogroups.com>; <DrakeList@...>
Sent: Wednesday, March 13, 2013 8:51 AM
Subject: [DrakeRadio] Crystals wanted for 17 meters (and 60 meters?)

> Looking for a 29.1 MHz crystal to cover 18.0 to 18.5 MHz
> on my R-4B and
> R-4C. I was lucky to already have crystals to cover 30 and
> 12 meters.
>
> Also, I'd like to know what to expect if I find and use a
> 16.1 MHz
> crystal for 5.0-5.5 MHz to cover the 60 meter channels. I
> know don't try
> to transmit with the 4 line there.
>
I don't know what is "reasonable" but you can buy brand new crystals from International Crystal for about $20 each. They know the constants for the crystals. The chart in the handbook will tell you the crystal frequencies required. I've bought several crystals from ICM for both Drake and Collins receivers, all were right on the nose.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12563. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 16:53:50 UTC
From: Garey Barrell
Topic: 12538 Message: 12563

On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
the crystal oscillator runs at 21.5 MHz.

Yes, only PA tubes inside the cage.

Don't remove tubes from sockets, just rock them back and forth a little one at a time.

Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
>
> Are the three finals the only tubes in the final cage?
>
> It's hard to physically check all the tubes. There are so many I get confused.
>
> Would that protection bulb be inside the cage with the finals?
>
> What frequency can I listen to to hear local oscilators from the receiver?
>
> These answers will give me something to do a while. Thanks to you and Don.
>
> 73, WA9RYF
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 13, 2013 9:57 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Howard -
>
> That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> #47 bulb, just with a bi-pin base.

>
> Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> problem if that is the cause.
>
> You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> rigs with ALL connected to their own antenna, the bulb isn't necessary.
>
> I assume it wasn't the slide switch on the side.?
>
> Do you have PA idle current when PTT is closed?
>
> Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> times. Not the PA tubes.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
> > Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.
> >
> > 73,
> > Howard
> > ----- Original Message -----
> > From: Don Cunningham
> > To: DrakeRadio@yahoogroups.com
> > Sent: Tuesday, March 12, 2013 9:56 PM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
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> > 73,
> > Don

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12564. Re: [DrakeRadio] greasy residual in between the dials on TR7 ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 16:58:42 UTC
From: Richard Knoppow
Topic: 12549 Message: 12564

----- Original Message -----
From: <vacuuminded2@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 13, 2013 1:26 AM
Subject: Re: [DrakeRadio] greasy residual in between the dials on TR7 ?

> Freon TF. If you can find any, and that's a BIG "if"
> thanks to the environmental so-and-so's. Used to be the
> industry standard. Good luck getting all the grease out
> of there without disassembly or damage otherwise-
>
> GL
> Chris

I think Tri-chlor was more common, also an environmental no-no (and for good reason). I don't know what the gears in the TR-7 are made of. If plastic you will have to test to make sure that whatever solvent you use does not damage them. In general good solvents for degreasing are dry isopropyl alcohol and naphtha. Isopropyl alcohol (AKA isopropanol) absorbs water until it reaches 91% so is not regularly sold at greater concentrations. However, it is available as 99+ % from many stores that sell computer supplies. The problem is that any moisture in the alcohol is left when it evaporates. Naphtha is also sold as lighter fluid. Its main drawback is that its quite inflammable. However pure naphtha does not leave a residue. It is available at most stores that sell paint. Kerosene (called paraffin oil or just paraffin in England) is also an effective degreaser but leaves an oily residue which must then be cleaned off using naphtha. All three of these are relatively safe around plastics and most paint but not al so test. Other common solvents like xylol (AKA xylene) or acetone will directly attack many plastics and paint. Apply the solvent with a small brush rather than spraying it.
Brass gears do not need lubrication, steel gears do.
There is some controversy about plastic gears. Most are nylon or delrin and can probably run dry. It appears that some greases will eventually cause nylon to swell up and even crack.

--
Richard Knoppow
Los Angeles

WB6KBL
dickburk@...

12565. Re: [DrakeRadio] greasy residual in between the dials on TR7 ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 17:21:22 UTC
From: Dan Galligan
Topic: 12549 Message: 12565

I would think a 5% isopropanol solution, should be good. But, certainly, test it first, in a non visible area. If that's too volatile, orange oil solvent, seems to be the miracle cleaner, currently. I think I might give it a try. Also, if you can get a cloth on the area, maybe some of those cleaning/disinfectant wipes, that seem to be everywhere now, might be good. I use them to Kees all of my boat anchors clean, and have never had them damage anything.

73,
Dan
W3RXO/6
Pomona, CA
DM14cb

If you put the federal government in charge of the Sahara Desert, in five years, there would be a shortage of sand-Milton Freidman

Sent from my somewhat brighter, larger, electronic leash.

On Mar 13, 2013, at 9:58, Richard Knoppow <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: <vacuuminded2@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, March 13, 2013 1:26 AM
> Subject: Re: [DrakeRadio] greasy residual in between the
> dials on TR7 ?
>
>
>> Freon TF. If you can find any, and that's a BIG "if"
>> thanks to the environmental so-and-so's. Used to be the
>> industry standard. Good luck getting all the grease out
>> of there without disassembly or damage otherwise-
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>> Chris
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> I think Tri-chlor was more common, also an
> environmental no-no (and for good reason). I don't know
> what the gears in the TR-7 are made of. If plastic you will
> have to test to make sure that whatever solvent you use does
> not damage them. In general good solvents for degreasing
> are dry isopropyl alcohol and naphtha. Isopropyl alcohol
> (AKA isopropanol) absorbs water until it reaches 91% so is
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> fluid. Its main drawback is that its quite inflammable.
> However pure naphtha does not leave a residue. It is
> available at most stores that sell paint. Kerosene (called
> paraffin oil or just paraffin in England) is also an
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> then be cleaned off using naphtha. All three of these are
> relatively safe around plastics and most paint but not al so
> test. Other common solvents like xylol (AKA xylene) or
> acetone will directly attack many plastics and paint.
> Apply the solvent with a small brush rather than
> spraying it.
> Brass gears do not need lubrication, steel gears do.
> There is some controversy about plastic gears. Most are
> nylon or delrin and can probably run dry. It appears that
> some greases will eventually cause nylon to swell up and
> even crack.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12566. Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 20:16:21 UTC
From: slowcountry1
Topic: 12522 Message: 12566

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
> >>
> > Richard,
> >
> > I checked every one of those points. I also removed the
> > head and pulled out the element. I quickly unsoldered the
> > element from the red and green connection leads. The
> > element shows open when ohm'd. Connecting for a millivolt
> > reading the meter shows no response to a whistle. These
> > were the last to checks that I made.
> >
> > So, I'm assuming my "dead element" assumption was correct.
> >
> Well, I think you are right. Did you look at the voice
> coil leads at the terminals of the capsule. It sounds as
> though you did. Sometimes the leads come loose from the
> terminals so its worth inspecting this closely. One would
> expect that resoldering the wires from the body of the mic
> would also resolder these but perhaps not. Anyway, you
> can't loose anything by looking.
> Its possible the voice coil opened up or was burned out
> by an application of a lot of power but the coils are a lot
> more rugged than you would think.
> I just hate to give up on things and these are pretty
> good microphones.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Richard,

Thanks for all of the information. I do not give up easily either that's why I was hoping someone would have a pointer or two; which you did.

Inspecting the mic element today, I noticed the coil wires were evaporated just under the plastic element. I carefully removed the plastic, gently unraveled the wire, enough to make it back out to the terminals and re-soldered. I then measured across the terminals and viola, I had 150 ohms. While attempting to reassemble the coil and plastic element, my big hands managed to break the wire again. This time when I attempted to unravel more wire, it turned into a birds nest. I had it under control and now it is ruined most definitely.

I did a couple of google searches however; I wasn't successful in sourcing any replacement parts. Because I'm not a collector of these units, I don't want to spend a huge amount of money on it however; if I could spend a reasonable amount of money to make it functional again, I most likely would.

Thanks for all your help,

Doug

12567. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 20:57:48 UTC
From: Jim Shorney
Topic: 12522 Message: 12567

On Wed, 13 Mar 2013 20:16:21 -0000, slowcountry1 wrote:

> I had it under control and now it is ruined most definitely.
>
>I did a couple of google searches however; I wasn't successful in sourcing any replacement parts. Because I'm not a collector of these units, I don't want to spend a huge amount of money on it however; if I could spend a reasonable amount of money to make it functional again, I most likely would.
>

Kudos for trying, Doug. I can't even count the number of times that I fixed something that couldn't be fixed, just because I tried.

The older mics are not supported by EV anymore, that's the way of things these days. Contact me off-list if you want the name of my friend that repairs this stuff. He may know of a parts source, if nothing else.

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12568. Re: [DrakeRadio] greasy residual in between the dials on TR7 ?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 21:15:23 UTC
From: <w1es1982@...>
Topic: 12549 Message: 12568

Someone had posted earlier that he thought he'd noticed that the numbering was internal on the discs. Not sure whether that's true or not: I know that you can see raised areas on the B-Line discs but I can't remember which side. I limit the washing of the discs to dishwashing soap (i.e., Joy, Dawn, etc.) and then rinse with distilled water to prevent spotting.

HTH,

Steve, W1ES/4

---- Dan Galligan <w3rxo@...> wrote:
> I would think a 5% isopropanol solution, should be good. But, certainly, test it first, in a non visible area. If that's too volatile, orange oil solvent, seems to be the miracle cleaner, currently. I think I might give it a try. Also, if you can get a cloth on the area, maybe some of those cleaning/disinfectant wipes, that seem to be everywhere now, might be good. I use them to Kees all of my boat anchors clean, and have never had them damage anything.
>
> 73,
> Dan
> W3RXO/6
> Pomona, CA
> DM14cb
>
> If you put the federal government in charge of the Sahara Desert, in five years, there would be a shortage of sand-Milton Freidman
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Mar 13, 2013, at 9:58, Richard Knoppow <1oldlens1@...> wrote:
>
> >
> > ----- Original Message -----
> > From: <vacuuminded2@...>
> > To: <DrakeRadio@yahoogroups.com>
> > Sent: Wednesday, March 13, 2013 1:26 AM
> > Subject: Re: [DrakeRadio] greasy residual in between the
> > dials on TR7 ?
> >
> >
> >> Freon TF. If you can find any, and that's a BIG "if"
> >> thanks to the environmental so-and-so's. Used to be the
> >> industry standard. Good luck getting all the grease out
> >> of there without disassembly or damage otherwise-
> >>
> >> GL

> >> Chris
> >
> > I think Tri-chlor was more common, also an
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> > what the gears in the TR-7 are made of. If plastic you will
> > have to test to make sure that whatever solvent you use does
> > not damage them. In general good solvents for degreasing
> > are dry isopropyl alcohol and naphtha. Isopropyl alcohol
> > (AKA isopropanol) absorbs water until it reaches 91% so is
> > not regularly sold at greater concentrations. However, it
> > is available as 99+ % from many stores that sell computer
> > supplies. The problem is that any moisture in the alcohol
> > is left when it evaporates. Naphtha is also sold as lighter
> > fluid. Its main drawback is that its quite inflammable.
> > However pure naphtha does not leave a residue. It is
> > available at most stores that sell paint. Kerosene (called
> > paraffin oil or just paraffin in England) is also an
> > effective degreaser but leaves an oily residue which must
> > then be cleaned off using naphtha. All three of these are
> > relatively safe around plastics and most paint but not al so
> > test. Other common solvents like xylol (AKA xylene) or
> > acetone will directly attack many plastics and paint.
> > Apply the solvent with a small brush rather than
> > spraying it.
> > Brass gears do not need lubrication, steel gears do.
> > There is some controversy about plastic gears. Most are
> > nylon or delrin and can probably run dry. It appears that
> > some greases will eventually cause nylon to swell up and
> > even crack.
> >
> >
> > --
> > Richard Knoppow
> > Los Angeles
> > WB6KBL
> > dickburk@...
> >
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
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>
> [Non-text portions of this message have been removed]
>

12569. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 22:26:32 UTC
From: Richard Knoppow
Topic: 12522 Message: 12569

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 13, 2013 1:16 PM
Subject: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

> Thanks for all of the information. I do not give up
> easily either that's why I was hoping someone would have a
> pointer or two; which you did.
>
> Inspecting the mic element today, I noticed the coil wires
> were evaporated just under the plastic element. I
> carefully removed the plastic, gently unraveled the wire,
> enough to make it back out to the terminals and
> re-soldered. I then measured across the terminals and
> viola, I had 150 ohms. While attempting to reassemble the
> coil and plastic element, my big hands managed to break
> the wire again. This time when I attempted to unravel
> more wire, it turned into a birds nest. I had it under
> control and now it is ruined most definitely.

> I did a couple of google searches however; I wasn't
> successful in sourcing any replacement parts. Because I'm
> not a collector of these units, I don't want to spend a
> huge amount of money on it however; if I could spend a
> reasonable amount of money to make it functional again, I
> most likely would.
>
> Thanks for all your help,
>
> Doug
>

Good for you to have given it a try. Its not an easy repair. I would hang on to the case for the parts, for instance you might need the transformer for something. It will work as a matching transformer for low to high impedance mics.
The 630 was sold mostly for public address use. The 635 was similar but made for broadcast use. I suspect that the elements in the 635 were selected to have slightly better performance. I am not sure if EV was the first to use Mylar diaphragms but may well have been. One advantage is that the uniformity of the diaphragms is far better than those made of metal so the performance of individual mics does not vary much. Its also very rugged; you can push your finger

into an Acoustalloy diaphragm without damaging it while that will ruin a metal diaphragm. RCA used plastic diaphragms on some microphones going back to the 88-A but I don't know what it was made of. These diaphragms did not yield very good high frequency response but were pretty much weatherproof. Mylar diaphragms were as light weight (properly low mass) as aluminum so the HF response was at least as good. The EV 655 had flat response to 15K and the 655C to 20K, unheard of in a moving coil dynamic at the time.

EV's use of Mylar diaphragms and their Variable-D cardioid principle blew almost everyone else out of the water for broadcast microphones. EV mics were not expensive, light weight, extremely reliable, extremely durable, and had quite good audio quality.

The microphone that came to be known as a Buchanan Hammer was the model 650. This was a dynamic with response to 15K and high output that was shaped like a hammer. Lou Burroughs, of EV, used to demonstrate their ruggedness by hammering nails with them. Sometime around 1950 WJR in Detroit, a CBS affil with lots of local production, dumped all their RCA and WE mics and replaced them with 650s. EV ran an ad showing them all. I wish I knew any interesting Drake stuff.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12570. Drake 2B Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 00:36:15 UTC
From: curtstamp
Topic: 12570 Message: 12570

Does anyone know what type of paint that could be used to highlight the arrows on the knobs? Think they were silver colored.

Also does anyone know where you can obtain Drake Knobs for the 2B?

12571. Re: [DrakeRadio] Drake 2B Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:08:57 UTC
From: Paul Kraemer
Topic: 12570 Message: 12571

I took a different approach
I think it looks GREAT
Get some of that metal foil tape like the HVAC guys use to seal the seams in ductwork
Put a small piece on the pointer part
Push it down firmly with an x acto knife and cut the outline against the knob and voilla. Chrome finish without being gaudy. Stays nice and crisp over the years too. Blends nice with the chrome ring insert on the knob too
I can photobucket or email pix if anybody wants to see
BTW FWIW the stuff works great to seal a box for rf. Doing some experimenting and just need a quickie enclosure? Cardboard box sealed with metal tape. Even has good continuity where overlapped
Just had to share that one
Paul K0UYA
----- Original Message -----
From: "curtstamp" <Curtstamp@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 13, 2013 7:36 PM
Subject: [DrakeRadio] Drake 2B Knobs

> Does anyone know what type of paint that could be used to highlight the
> arrows on the knobs? Think they were silver colored.
>
> Also does anyone know where you can obtain Drake Knobs for the 2B?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

12572. Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:43:11 UTC
From: Steve Wedge
Topic: 12572 Message: 12572

I can't believe I missed winning the latest "TR-44B" by only about $40. It sold for under $500 - which is less than a decent set of B-Twins normally brings!

So, how scarce, exactly, are these things? The last one that was up on eBay (admittedly - it was a 9.8/10) went for nearly $1500.

Opinions?

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!

[Non-text portions of this message have been removed]

12573. RV-4C VFO knob semi-difficult to turn

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:44:16 UTC
From: slowcountry1
Topic: 12573 Message: 12573

As I am returning my Drake equipment to service, I pulled my RV-4C out of the closet. I purchased it 10 years ago tested it, placed it in the closet and never used it. The VFO knob turned very harshly so I disassembled the dial / gear assembly, replaced the bearing grease, cleaned the dials etc. The VFO knob turns much smoother however; it still has a significant amount of resistance and a little bit of "jerking" at points. With the dials removed, everything turns very smooth. I added the slightest film of petroleum jelly between the dials and the plastic disc that separates them. In addition, I set out the locking ring just a touch. This helped some however; it is still not anywhere near as smooth as expected. All of the gears are plastic which I did not grease. The main resistance seems to be between the dials.

When I did the a fore mentioned treatment to my TR-4Cw, the VFO now turns like a dream; granted it uses brass gears and such. I'm not sure if this is just normal for the RV-4C or if something else is amiss. The previous owner had the VFO knob and selector switch set in too far causing scars on the face. I'm wondering if something else was left out of order however; I do not see anything obvious.

I really don't expect to use the RV-4C much, but it needs to be set up with the rest of the gear. I figured it should work as good as I can make it. Any suggestions would be appreciated.

Thanks,

Doug Coffman
N9XTF

12574. Re: [DrakeRadio] Drake 2B Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:45:14 UTC
From: Garey Barrell
Topic: 12570 Message: 12574

Testor's model paint. Hobby or craftstore. Bright silver.

Someone told me they were used on some type of tube tester, but I've never seen one. The Main
Tuning is custom.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

curtstamp wrote:
> Does anyone know what type of paint that could be used to highlight the arrows on the knobs? Think they were silver colored.
>
> Also does anyone know where you can obtain Drake Knobs for the 2B?
>

12575. Re: [DrakeRadio] RV-4C VFO knob semi-difficult to turn

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:49:22 UTC
From: Mark Pilant
Topic: 12573 Message: 12575

Hi Doug.

Just another data point...

I just finished getting my RV-4C working. While the dial is not as "light" as the one on the TR-4 I'm also bringing back to life (I need to do a transmit test before I write everything up for the forum) it is still fairly light.

When I look at the dial gears, there does appear to be some sort of lubricant on them. I don't know whether or not it is supposed to be there. (I expect not; but I don't know for sure.)

As I said, just another data point... :-)

73

- Mark N1VQW

12576. Re: [DrakeRadio] Drake 2B Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:52:26 UTC
From: Jim Wiley
Topic: 12570 Message: 12576

They were used on the Heathkit TT-1 series of tube testers, and on
some other Heath products (the ignition analyzer scope comes to mind)

- Jim, KL7CC

On 3/13/2013 5:45 PM, Garey Barrell wrote:
>
>
> Someone told me they were used on some type of tube tester, but I've
> never seen one.
>

[Non-text portions of this message have been removed]

12577. Re: [DrakeRadio] RV-4C VFO knob semi-difficult to turn

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:53:07 UTC
From: Garey Barrell
Topic: 12573 Message: 12577

Doug -

If you haven't already seen this, give it a look.

<http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> As I am returning my Drake equipment to service, I pulled my RV-4C out of the closet. I purchased it 10 years ago tested it, placed it in the closet and never used it. The VFO knob turned very harshly so I disassembled the dial / gear assembly, replaced the bearing grease, cleaned the dials etc. The VFO knob turns much smoother however; it still has a significant amount of resistance and a little bit of "jerking" at points. With the dials removed, everything turns very smooth. I added the slightest film of petroleum jelly between the dials and the plastic disc that separates them. In addition, I set out the locking ring just a touch. This helped some however; it is still not anywhere near as smooth as expected. All of the gears are plastic which I did not grease. The main resistance seems to be between the dials.
>
> When I did the a fore mentioned treatment to my TR-4Cw, the VFO now turns like a dream; granted it uses brass gears and such. I'm not sure if this is just normal for the RV-4C or if something else is amiss. The previous owner had the VFO knob and selector switch set in too far causing scars on the face. I'm wondering if something else was left out of order however; I do not see anything obvious.
>
> I really don't expect to use the RV-4C much, but it needs to be set up with the rest of the gear. I figured it should work as good as I can make it. Any suggestions would be appreciated.
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
>

12578. Re: [DrakeRadio] Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 01:58:13 UTC
From: William Houghton
Topic: 12572 Message: 12578

Steve, there is no guarantee that the winner's top bid was only $40 above yours.
His/her bid could have been several hundred above yours.

From: Steve Wedge <w1es1982@...>
To: drakeradio@yahoogroups.com
Sent: Wed, March 13, 2013 6:41:31 PM
Subject: [DrakeRadio] Okay, so how rare are they?

I can't believe I missed winning the latest "TR-44B" by only about $40. It sold
for under $500 - which is less than a decent set of B-Twins normally brings!

So, how scarce, exactly, are these things? The last one that was up on eBay
(admittedly - it was a 9.8/10) went for nearly $1500.

Opinions?

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12579. Re: [DrakeRadio] Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 02:13:00 UTC
From: Barry
Topic: 12572 Message: 12579

That's one of the annoying parts. You never know how far you were really outbid.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "William Houghton" <rdrbill@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 13, 2013 8:58:13 PM
> Subject: Re: [DrakeRadio] Okay, so how rare are they?
>
> Steve, there is no guarantee that the winner's top bid was only $40
> above yours.
> His/her bid could have been several hundred above yours.

12580. Re: [DrakeRadio] Drake 2B Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 02:55:21 UTC
From: Jim Shorney
Topic: 12570 Message: 12580

Jackson 658A, for one. Maybe not a prefect match, but close. 648 too, from the looks of it.

http://tone-lizard.com/Jackson.html

73

-Jim
NU0C

On Wed, 13 Mar 2013 21:45:14 -0400, Garey Barrell wrote:

>Testor's model paint. Hobby or craftstore. Bright silver.
>
>Someone told me they were used on some type of tube tester, but I've never seen one. The Main
>Tuning is custom.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>curtstamp wrote:
>> Does anyone know what type of paint that could be used to highlight the arrows on the knobs? Think they were silver colored.
>>
>> Also does anyone know where you can obtain Drake Knobs for the 2B?
>>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12581. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 03:03:11 UTC
From: Jim Shorney
Topic: 12522 Message: 12581

On Wed, 13 Mar 2013 15:26:32 -0700, Richard Knoppow wrote:

>EV's use of Mylar diaphragms and their Variable-D
>cardioid principle blew almost everyone else out of the
>water for broadcast microphones.

I've got two RE-20s and an RE-320 in the collection now. If I ever get the time, they will get plugged in to a Drake and I'll have some fun doing mic comparisons. Also a few EV PL-line dynamic and condensers, but the REs interest me the most ATM.

73

-Jim
NU0C

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

12582. Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 03:06:04 UTC
From: VE3UK Bob
Topic: 12572 Message: 12582

If you are talking about the stacked R4B/T4B that just sold on EvilBay for $414, that was NOT a TR-44B.

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> I can't believe I missed winning the latest "TR-44B" by only about $40. It sold for under $500 - which is less than a decent set of B-Twins normally brings!
>
> So, how scarce, exactly, are these things? The last one that was up on eBay (admittedly - it was a 9.8/10) went for nearly $1500.
>
> Opinions?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> "I can't complain, but sometimes I still do."
> - Joe Walsh
>
> If the above message appears, it came from Steve's Son of Laptop!
>
> [Non-text portions of this message have been removed]
>

12583. Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 03:07:27 UTC
From: jerry_k9gas
Topic: 12294 Message: 12583

Update, it turned out that a valve job did the trick. V4 was off, but I was able to get all the tubes for around $30 so I just replaced them all. Now it's back to it's beauty state of operation. Thanks for the replies and tips!
I'm so glad that covered it as I was getting ready to dive in, and I was nervous!
Thanks again
Jerry k9gas

--- In DrakeRadio@yahoogroups.com, "jerry_k9gas" <gsitton@...> wrote:
>
> Hi All,
> I've got an issue that really just started with my R4C. I get nice audio and proper signal on the meter when using AM. On SSB, it's really low audio and no signal showing on the meter as well. I haven't tried cleaning yet. It was gone through petty much last June by SAJ. I've tried moving the band and function switches back and forth to see if that would help, but it's not doing it. Oxidation likely? I thought it would be best to post here before I dive into it and hopefully get some pointers from the experienced. Thanks,
Jerry K9GAS
>

12584. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 04:34:29 UTC
From: Jim Shorney
Topic: 12294 Message: 12584

Glad you got it working. For future reference, wholesale replacement of all the tunes just because you can is generally not recommended, for various reasons. It's usually best just to replace the bad one and be happy.

73

-Jim
NU0C

On Thu, 14 Mar 2013 03:07:27 -0000, jerry_k9gas wrote:

>Update, it turned out that a valve job did the trick. V4 was off, but I was able to get all the tubes for around $30 so I just replaced them all. Now it's back to it's beauty state of operation. Thanks for the replies and tips!
>I'm so glad that covered it as I was getting ready to dive in, and I was nervous!

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12585. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 05:18:42 UTC
From: Richard Knoppow
Topic: 12522 Message: 12585

----- Original Message -----
From: "Jim Shorney" <jshorney@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 13, 2013 8:03 PM
Subject: Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

> On Wed, 13 Mar 2013 15:26:32 -0700, Richard Knoppow wrote:
>
>>EV's use of Mylar diaphragms and their Variable-D
>>cardioid principle blew almost everyone else out of the
>>water for broadcast microphones.
>
>
> I've got two RE-20s and an RE-320 in the collection now.
> If I ever get the
> time, they will get plugged in to a Drake and I'll have
> some fun doing mic
> comparisons. Also a few EV PL-line dynamic and condensers,
> but the REs interest
> me the most ATM.
>
> 73
>
> -Jim
> NU0C

The RE-20 was designed for radio announcing and has a
very flattering voice sound. EV had slowly rolled off the
low end on many of their mics beginning with the 666R and I
found them somewhat thin sounding for studio recording. The
RE-20 was supposed to have a little of the old ribbon mic
sound. They became very popular for radio. They are also in
well protected case with nested shock mounts. I am not
familiar with the RE-320 as far as sound. I left the sound
end of things too long ago and can't hear any more so I am
hors de combat about comparing microphones, loudspeakers,
etc. Very frustrating!
EV had a fellow named Alpha M. Wiggins working for them
as a designer. Wiggins was the inventor of the Variable-D
principle for obtaining a cardioid pattern from a moving
coil microphone and also designed the Electro-Voice
Circlotron audio amplifier. I won't try to explain how a
cardioid works here but EV's method of generating it did not
produce the "proximity effect" common to all gradient type
microphones. The proximity effect is what causes the

increase in bass response when used close to the source. It also allows the use of a dynamic element that is resistance controlled (acoustical resistance that is) rather than mass controlled. The practical result is far less sensitivity to conducted vibration so there is no more rumble than from a non-directional microphone. Also, because EV was able to make their cardioid microphones mechanically symmetrical the polar pattern was also symmetrical, a great advantage for many applications. For comparison a 666 or RE-15 or RE-20 has a pattern which is a true cardioid of revolution where a microphone with non-symmetrical diaphragm or case such as the famous RCA 77-DX, or BK-5 or KU-2 has a pattern that is a cardioid only in one plane. This is audible where there is considerable background noise or reverberation because the frequency response of the microphone off axis is far from flat plus its directional discrimination is not very good. RCA was honest enough to publish the curves for their broadcast microphones but many other manufacturers were not. Despite the advantages I never liked EV mics for studio recording. On a piano the RE-15 sounded to me like it had a peak limiter in the circuit where a 77D did not and reproduced the piano strike tones better. I also never liked EV mics on drums but others did. As far as that goes the famous Shure mics to my ear made drums sound like someone beating on cardboard boxes. For reference my favorites were mostly Neumann condenser mics and Schoeps condensers. Well, my hearing now makes everything sound like it has a clipper working. I am going to find out if anything can be done about that. I can think of worse things that can happen when you get old.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12586. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 05:19:53 UTC
From: Richard Knoppow
Topic: 12294 Message: 12586

----- Original Message -----
From: "jerry_k9gas" <gsitton@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 13, 2013 8:07 PM
Subject: [DrakeRadio] Re: Low SSB receive R4C

> Update, it turned out that a valve job did the trick. V4
> was off, but I was able to get all the tubes for around
> $30 so I just replaced them all. Now it's back to it's
> beauty state of operation. Thanks for the replies and
> tips!
> I'm so glad that covered it as I was getting ready to dive
> in, and I was nervous!
> Thanks again
> Jerry k9gas
>
Valve jobs work on a lot of old cars too.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12587. Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 05:42:53 UTC
From: Jim Shorney
Topic: 12522 Message: 12587

On Wed, 13 Mar 2013 22:18:42 -0700, Richard Knoppow wrote:

>RE-20 was supposed to have a little of the old ribbon mic
>sound. They became very popular for radio. They are also in
>well protected case with nested shock mounts. I am not
>familiar with the RE-320 as far as sound.

I'm intimately familiar with the internals of the RE-20 at this point. Without going into detail, I'll just say that I know the fellow who repairs them. :) He has taught me a thing or two. The 320 looks like essentially a charcoal black RE-20, is made offshore, and is pretty much an RE-27 element in an RE-20 housing. As such, from what I am told it is a little brighter than an RE-20. It was designed as primarily a kick drum mic, so the EQ options are a little different, but I'm reading that lots of folks like them for vocal use as well.

>EV had a fellow named Alpha M. Wiggins working for them
>as a designer. Wiggins was the inventor of the Variable-D
>principle for obtaining a cardioid pattern from a moving
>coil microphone and also designed the Electro-Voice
>Circlotron audio amplifier. I won't try to explain how a
>cardioid works here but EV's method of generating it did not
>produce the "proximity effect" common to all gradient type
>microphones.

The RE-20 cartridge is quite interesting to look at, different in size and shape than just about any other dynamic you'll see. Only true microphone geeks would probably appreciate it. I probably shouldn't say too much about how it actually works, although it's probably common knowledge in the industry after all these years... The humbucking coil was also an EV innovation. The RE-27 and RE-320 are similar in concept, but the construction of the cartridge is entirely different mechanically.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12588. Re: [DrakeRadio] Re: valve/other

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 12:32:32 UTC
From: Chgypsy@...
Topic: 12588 Message: 12588

Now hold on;

Jerry could be of British descent, and its real hard to get a call squeezed
in that is
K9PETROL
And of course Richard would have loved the call K6NOPOW if he were
allowed that 8 digit call.

Either way unique vanity plates for cars. HI
Carl wd8nhk

1oldlens1@... (mailto:1oldlens1@...) writes:

Update, it turned out that a valve job did the trick. V4
> was off,> Jerry k9gas
>
Valve jobs work on a lot of old cars too.
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

12589. RE: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 14:18:16 UTC
From: Terrell Hamilton
Topic: 12522 Message: 12589

These discussions about microphone technology are very interesting. They've always been a little mysterious to me.

Back when I knew something about ham radio, I only did CW, but I remember two mikes by electrovoice, the 664 and 638 that were popular.

Does anyone know anything about these two?

I've got a couple of D104's that aren't working at the moment, and I suppose that the crystal elements are kaput, but that's good for another thread, I guess.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Jim Shorney
Sent: Wednesday, March 13, 2013 10:43 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: ElectroVoice 630 and TR-4C

On Wed, 13 Mar 2013 22:18:42 -0700, Richard Knoppow wrote:

>RE-20 was supposed to have a little of the old ribbon mic
>sound. They became very popular for radio. They are also in
>well protected case with nested shock mounts. I am not
>familiar with the RE-320 as far as sound.

I'm intimately familiar with the internals of the RE-20 at this point. Without
going into detail, I'll just say that I know the fellow who repairs them. :)

He has taught me a thing or two. The 320 looks like essentially a charcoal black RE-20, is made offshore, and is pretty much an RE-27 element in an RE-20
housing. As such, from what I am told it is a little brighter than an RE-20. It
was designed as primarily a kick drum mic, so the EQ options are a little different, but I'm reading that lots of folks like them for vocal use as well.

>EV had a fellow named Alpha M. Wiggins working for them
>as a designer. Wiggins was the inventor of the Variable-D
>principle for obtaining a cardioid pattern from a moving
>coil microphone and also designed the Electro-Voice
>Circlotron audio amplifier. I won't try to explain how a
>cardioid works here but EV's method of generating it did not

>produce the "proximity effect" common to all gradient type
>microphones.

The RE-20 cartridge is quite interesting to look at, different in size and shape than just about any other dynamic you'll see. Only true microphone geeks
would probably appreciate it. I probably shouldn't say too much about how it actually works, although it's probably common knowledge in the industry after
all these years... The humbucking coil was also an EV innovation. The RE-27 and
RE-320 are similar in concept, but the construction of the cartridge is entirely different mechanically.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

12590. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 14:51:14 UTC
From: Steve Wedge
Topic: 12572 Message: 12590

That is the one. How rare are they?

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Mar 13, 2013, at 11:06 PM, "VE3UK Bob" <leschyna@...> wrote:

> If you are talking about the stacked R4B/T4B that just sold on EvilBay for $414, that was NOT a TR-44B.
>
> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
> >
> > I can't believe I missed winning the latest "TR-44B" by only about $40. It sold for under $500 - which is less than a decent set of B-Twins normally brings!
> >
> > So, how scarce, exactly, are these things? The last one that was up on eBay (admittedly - it was a 9.8/10) went for nearly $1500.
> >
> > Opinions?
> >
> > 73,
> >
> > Steve Wedge, W1ES/4
> >
> > "I can't complain, but sometimes I still do."
> > - Joe Walsh
> >
> > If the above message appears, it came from Steve's Son of Laptop!
> >
> > [Non-text portions of this message have been removed]
> >
>
>

[Non-text portions of this message have been removed]

12591. Re: [DrakeRadio] Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 14:52:42 UTC
From: Steve Wedge
Topic: 12572 Message: 12591

Oh, I do know that. It still stinks that I missed it by so little. My bid was 409.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Mar 13, 2013, at 9:58 PM, William Houghton <rdrbill@pacbell.net> wrote:

> Steve, there is no guarantee that the winner's top bid was only $40 above yours.
> His/her bid could have been several hundred above yours.
>
> _____
> From: Steve Wedge <w1es1982@...>
> To: drakeradio@yahoogroups.com
> Sent: Wed, March 13, 2013 6:41:31 PM
> Subject: [DrakeRadio] Okay, so how rare are they?
>
>
> I can't believe I missed winning the latest "TR-44B" by only about $40. It sold
> for under $500 - which is less than a decent set of B-Twins normally brings!
>
> So, how scarce, exactly, are these things? The last one that was up on eBay
> (admittedly - it was a 9.8/10) went for nearly $1500.
>
> Opinions?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> "I can't complain, but sometimes I still do."
> - Joe Walsh
>
> If the above message appears, it came from Steve's Son of Laptop!
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

12592. looking for a 4 line receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 15:18:28 UTC
From: yash@aol.com
Topic: 12375 Message: 12592

Have been looking for a new receiver, will consider any and all of the 4 line receivers.Cosmetics not too important. Would like to find a operational receiver ,but will consider all. can do pay pal + or USPS mo. NOT INTERESTED IN A ENTIRE 4 LINE STATION,JUST THE RECEIVER. Please get back off list.
THANKS
DALE WT4T

[Non-text portions of this message have been removed]

12593. 60 meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 15:22:44 UTC
From: Charles Ring
Topic: 12555 Message: 12593

Has anyone actually tried to receive 5.3 - 5.4 MHz on a 4 line receiver?
Results?

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

12594. Fw: note

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 16:28:38 UTC
From: Myteaquinn
Topic: 12594 Message: 12594

http://www.fsn-gmbh.de/cgz/quxtjmhdcpjfrzd/tglwwqlvzfgz.php

[Non-text portions of this message have been removed]

12595. Re: valve/other

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 16:53:06 UTC
From: jerry_k9gas
Topic: 12588 Message: 12595

That was for the benefit of our northern friends. hi
I've got a close friend that's Britt as well.
I couldn't resist!
Jerry k9gas(oline)

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
> Now hold on;
>
> Jerry could be of British descent, and its real hard to get a call squeezed
> in that is
> K9PETROL
> And of course Richard would have loved the call K6NOPOW if he were
> allowed that 8 digit call.
>
> Either way unique vanity plates for cars. HI
> Carl wd8nhk
>
>
>
>
> _1oldlens1@..._ (mailto:1oldlens1@...) writes:
>
> Update, it turned out that a valve job did the trick. V4
> > was off,> Jerry k9gas
> >
> Valve jobs work on a lot of old cars too.
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
>
> [Non-text portions of this message have been removed]
>

12596. Re: [DrakeRadio] looking for a 4 line receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 17:01:30 UTC
From: David Ball
Topic: 12375 Message: 12596

Hello Dale
I posted a lot of photos to the group of a RC4A that I was going to refurbish but the response that I got suggested I should not bother. Check the photos (R4-A for Restoration). Check http://www.parcelhero.com/Home which is my prefered carrier.
If you are interested let me know and I will take it to a Ham club on Tuesday next week and ask them to test it.
United KIngdom Postcode PH33 7DU (You'll need this to get a quote for carriage)
DaveB

----- Original Message -----
From: "yash@..." <yash@...>
To: DrakeRadio@yahoogroups.com
Date: Thu, 14 Mar 2013 15:18 -0000
Subject: [DrakeRadio] looking for a 4 line receiver

>
> Have been looking for a new receiver, will consider any and all of the 4 line receivers.Cosmetics not too important. Would like to find a operational receiver ,but will consider all. can do pay pal + or USPS mo. NOT INTERESTED IN A ENTIRE 4 LINE STATION,JUST THE RECEIVER. Please get back off list.
> THANKS
> DALE WT4T
>
> [Non-text portions of this message have been removed]
>
>
>

12597. Re: [DrakeRadio] Re: Low SSB receive R4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 19:24:45 UTC
From: Mike
Topic: 12294 Message: 12597

I'll second that!

Strange and weird things can happen with a tube swap.

Mike wb8vge

Sent from my iPhone

On Mar 14, 2013, at 12:34 AM, "Jim Shorney" <jshorney@...> wrote:

>
> Glad you got it working. For future reference, wholesale replacement of all the
> tunes just because you can is generally not recommended, for various reasons.
> It's usually best just to replace the bad one and be happy.
>
> 73
>
> -Jim
> NU0C
>
> On Thu, 14 Mar 2013 03:07:27 -0000, jerry_k9gas wrote:
>
> >Update, it turned out that a valve job did the trick. V4 was off, but I was able to get all the tubes for around $30 so I just replaced them all. Now it's back to it's beauty state of operation. Thanks for the replies and tips!
> >I'm so glad that covered it as I was getting ready to dive in, and I was nervous!
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

12598. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-13 09:34:57 UTC
From: Chgypsy@...
Topic: 12538 Message: 12598

howard@... writes:

One day it just stopped receiving.
The gurus will be in shortly.
The switch on the L side in the forward position.
The # 12 light bulb in the cage, or its contacts.
By memory the Vox and anti Vox pots on the right side could hold the relay
in the wrong position.
The relay contacts themselves, as I recall the early ones in particular
were open.
I could be wrong on any of these items. Carl wd8nhk

[Non-text portions of this message have been removed]

12599. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-11 19:07:56 UTC
From: Ken Winterling
Topic: 12343 Message: 12599

Thanks. Both you and Garey provided essentially the same response.

Over the years I have used flame proof metal oxide and flame proof carbon film resistors purchased from Dave at Just Radios, http://www.justradios.com/resistors.html#product.
Both types are +/- 5%, and come in 1/2W, 1W, and 2W sizes.

According to the literature they are made with a vapor or spray of tin chloride or tin-oxide film over a high thermal conductive rod or by vacuum depositing a thin film of carbon over a high thermal conductive ceramic rod. No mention of a spiral trace or other inductor-creating structure is mentioned. I have never had trouble using them anywhere in a circuit.

I will give the Ohmites a try but will also order more of the flame proof resistors from Dave to replenish my stock.

Ken
WA2LBI

On Mon, Mar 11, 2013 at 2:13 PM, slowcountry1 <dcoffman@...>wrote:

>
>
> --- In DrakeRadio@yahoogroups.com, Ken Winterling <wa2lbi@...> wrote:
> >
> > Garey,
> >
> > I am working on a T-4XC and, among other components, will be replacing
> the
> > final cathode resistors, R53 and R54, and screen resistors, R50 and R51.
> > In the past I used CC replacements from my stock but this time I plan on
> > using the Ohmite OX/OY ceramics.
> >
> > Below you mentioned that Drake tightened the spec to 5% (from 10%).
> Unless
> > I missed it, the OX and OY series seem to be available in 10% only. Do
> you
> > have a link and/or part number to 5% devices?
> >
> > Thanks,
> >
> > Ken
> > WA2LBI
> >
> >
> > On Mon, Mar 4, 2013 at 4:43 PM, Garey Barrell <k4oah@...> wrote:

> >
> > > Doug -
> > >
> > > Almost. Resistors R42, 43 and 44 are the Screen Grid (commonly called
> > > 'Screen') resistors and are
> > > the ones to check. Pin 2 is the Control Grid (commonly called 'Grid')
> and
> > > in this case have no
> > > resistors.
> > >
> > > Most resistors are 5% tolerance, which is indicated by the fourth color
> > > band on the resistor being
> > > 'gold'. If the fourthband is 'silver', the resistor is 10%. This is
> the
> > > tolerance for the value
> > > marked when new. So 68 ohm +/- 6.8 ohms is what you should read as
> these
> > > are 10% resistors.
> > >
> > > The 15 ohm resistors are also marked 10%, but Drake tightened that up
> to
> > > 5% since it directly
> > > affects how total current is shared by the three tubes. This means they
> > > should be 15 ohms +/- 0.75
> > > ohms. Yours are out of spec even at 10% and should be replaced. It's
> > > best if they are all within
> > > 5% of each other. The best replacements are the Ohmite OY ceramic
> > > composition resistors. Carbon
> > > and metal film resistors don't hold up well under the current surges
> these
> > > resistors are subject to.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > slowcountry1 wrote:
> > > > I have finished the work that I had planned on my TR-4Cw. Prior to
> > > putting it back in its case, a local knowledgeable ham suggested that I
> > > check the values of the cathode and grid resistors. My knowledge of
> tubes
> > > is very limited, I believe this is what he called them.
> > > >
> > > > The schematic that I have is very faint. I see resistors R176, R177,
> > > R178 that connect between pins 1 and 7 on the 6JB6 PA tubes. The
> values
> > > with the tubes removed is 69.3, 69.4 and 69.2 ohms. The schematic

> looks
> > > like it wants 68 ohms, very hard to read. I believe these to be the
> grid
> > > resistors.
> > > >
> > > > I see resistors R93, R167 and R121 that connect between pins 3 and 9
> on
> > > the 6JB6 PA tubes. The values with the tubes removed is 16.2, 17.0 and
> > > 16.7 ohms. The schematic looks like it wants 15 ohms, again very hard
> to
> > > read. I believe these to be the cathode resistors.
> > > >
> > > > First off, can someone verify that I have used grid and cathode
> > > resistors as the correct terms; second are these values close enough in
> > > tolerance or should I replace them (I would have expected a carbon comp
> > > resistor to increase in resistance); third have I measured the correct
> > > resistors at the correct pins?
> > > >
> > > > I made the measurements with my Fluke 289 and double checked against
> > > another DVMM so I'm content that the readings are accurate.
> > > >
> > > > I have replaced the electrolytics with the Hayseed Hams product. Are
> > > there any other items that I should check prior to putting the unit
> into
> > > normal everyday use?
> > > >
> > > > Thanks,
> > > >
> > > > Doug
> >
> >
> Ken,
>
> The OX an OY series come in 10% tolerance there is not a 5% tolerance in
> this line, so far as I could tell.
>
> What I did was purchase 12 each of the values required and ohm'd each one
> until I found 3 of each that were close in value and close to the value
> required. There was definitely 10% variation.
>
> For the 15 ohm 2 watt resistors I was able to find 15.23, 15.07, and
> 15.18. For the 68 ohm 1 watt I was able to find 67.84, 67.73 and 68.41. I
> figured I'd purchase extras because I have two other radios that I am going
> to do however; the values are far from what I wanted therefore I picked the
> closest matches for this exchange. Someone may have a more logical
> approach however; this is how I got what I needed.
>
>
>

[Non-text portions of this message have been removed]

12600. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 19:57:08 UTC
From: Garey Barrell
Topic: 12343 Message: 12600

Ken -

This message got trapped in Yahoo's SPAM filter. I didn't know they had one! :-)

Anyway, just found it.. There's nothing 'wrong' with those resistors, even though I believe they
are spiral etched to adjust value. The amount of inductance is negligible. The weakness is that
they do not handle current surges well at all, as there is very little mass to the resistive
element. So a surge has no where to go to 'slow' it down. Carbonor ceramic comps, by contrast, are
a pretty big lump of material so a brief surge is better absorbed. The Cathode resistors in the PA
are subject to surge currents, as much as 500 mA or more, especially when tuning.

All that said, they may work fine! There are fewer and fewer choices available today, especially
with everything going surface mount! :-)

Keep us posted!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ken Winterling wrote:
> Thanks. Both you and Garey provided essentially the same response.
>
> Over the years I have used flame proof metal oxide and flame proof carbon
> film resistors purchased from Dave at Just Radios, http://www.justradios
> .com/resistors.html#product.
> Both types are +/- 5%, and come in 1/2W, 1W, and 2W sizes.
>
> According to the literature they are made with a vapor or spray of tin
> chloride or tin-oxide film over a high thermal conductive rod or by vacuum
> depositing a thin film of carbon over a high thermal conductive ceramic
> rod. No mention of a spiral trace or other inductor-creating structure is
> mentioned. I have never had trouble using them anywhere in a circuit.
>
> I will give the Ohmites a try but will also order more of the flame proof
> resistors from Dave to replenish my stock.
>
> Ken

> WA2LBI
>
>

12601. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 20:16:37 UTC
From: Ken Winterling
Topic: 12343 Message: 12601

Garey,

With all of the idiots staying awake at night plotting ways to screw with our data this "lost in the spam filter" problem is happening more often. I would rather that than a loss of data...

As for the resistors, I agree with the surge issue but my thought is that a 2W flame proof metal oxide or flame proof carbon film device used in place of the specified 1W cathode resistors would be OK due to the increased dissipation ability of the higher wattage unit. Since the 2W devices are about the size of a 1W carbon comp it should fit in there w/o a problem and, hopefully, provide the surge "margin" we want.

Regardless, this may become a moot point because, as you noted, we are running out of choices as more surface mount devices come on the market. We need to seek alternatives now.

Ken
WA2LBI

On Thu, Mar 14, 2013 at 3:57 PM, Garey Barrell <k4oah@...> wrote:

> Ken -
>
> This message got trapped in Yahoo's SPAM filter. I didn't know they had
> one! :-)
>
> Anyway, just found it.. There's nothing 'wrong' with those resistors,
> even though I believe they
> are spiral etched to adjust value. The amount of inductance is
> negligible. The weakness is that
> they do not handle current surges well at all, as there is very little
> mass to the resistive
> element. So a surge has no where to go to 'slow' it down. Carbonor
> ceramic comps, by contrast, are
> a pretty big lump of material so a brief surge is better absorbed. The
> Cathode resistors in the PA
> are subject to surge currents, as much as 500 mA or more, especially when
> tuning.
>
> All that said, they may work fine! There are fewer and fewer choices
> available today, especially
> with everything going surface mount! :-)
>
> Keep us posted!!
>

> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Ken Winterling wrote:
> > Thanks. Both you and Garey provided essentially the same response.
> >
> > Over the years I have used flame proof metal oxide and flame proof carbon
> > film resistors purchased from Dave at Just Radios, http://www.justradios
> > .com/resistors.html#product.
> > Both types are +/- 5%, and come in 1/2W, 1W, and 2W sizes.
> >
> > According to the literature they are made with a vapor or spray of tin
> > chloride or tin-oxide film over a high thermal conductive rod or by
> vacuum
> > depositing a thin film of carbon over a high thermal conductive ceramic
> > rod. No mention of a spiral trace or other inductor-creating structure
> is
> > mentioned. I have never had trouble using them anywhere in a circuit.
> >
> > I will give the Ohmites a try but will also order more of the flame proof
> > resistors from Dave to replenish my stock.
> >
> > Ken
> > WA2LBI
> >
> >
>

[Non-text portions of this message have been removed]

12602. Re: [DrakeRadio] Re: TR-4Cw cathode and grid resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 20:20:18 UTC
From: Garey Barrell
Topic: 12343 Message: 12602

Ken -

Certainly worth a try. "Size DOES matter"! :-)

Let us know how it works out, please.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ken Winterling wrote:
> Garey,
>
> With all of the idiots staying awake at night plotting ways to screw with
> our data this "lost in the spam filter" problem is happening more often. I
> would rather that than a loss of data...
>
> As for the resistors, I agree with the surge issue but my thought is that a
> 2W flame proof metal oxide or flame proof carbon film device used in place
> of the specified 1W cathode resistors would be OK due to the increased
> dissipation ability of the higher wattage unit. Since the 2W devices are
> about the size of a 1W carbon comp it should fit in there w/o a problem
> and, hopefully, provide the surge "margin" we want.
>
> Regardless, this may become a moot point because, as you noted, we are
> running out of choices as more surface mount devices come on the market.
> We need to seek alternatives now.
>
> Ken
> WA2LBI
>
>
> On Thu, Mar 14, 2013 at 3:57 PM, Garey Barrell <k4oah@...> wrote:
>
>> Ken -
>>
>> This message got trapped in Yahoo's SPAM filter. I didn't know they had
>> one! :-)
>>
>> Anyway, just found it.. There's nothing 'wrong' with those resistors,
>> even though I believe they
>> are spiral etched to adjust value. The amount of inductance is
>> negligible. The weakness is that

>> they do not handle current surges well at all, as there is very little
>> mass to the resistive
>> element. So a surge has no where to go to 'slow' it down. Carbonor
>> ceramic comps, by contrast, are
>> a pretty big lump of material so a brief surge is better absorbed. The
>> Cathode resistors in the PA
>> are subject to surge currents, as much as 500 mA or more, especially when
>> tuning.
>>
>> All that said, they may work fine! There are fewer and fewer choices
>> available today, especially
>> with everything going surface mount! :-)
>>
>> Keep us posted!!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Ken Winterling wrote:
>>> Thanks. Both you and Garey provided essentially the same response.
>>>
>>> Over the years I have used flame proof metal oxide and flame proof carbon
>>> film resistors purchased from Dave at Just Radios, http://www.justradios
>>> .com/resistors.html#product.
>>> Both types are +/- 5%, and come in 1/2W, 1W, and 2W sizes.
>>>
>>> According to the literature they are made with a vapor or spray of tin
>>> chloride or tin-oxide film over a high thermal conductive rod or by
>> vacuum
>>> depositing a thin film of carbon over a high thermal conductive ceramic
>>> rod. No mention of a spiral trace or other inductor-creating structure
>> is
>>> mentioned. I have never had trouble using them anywhere in a circuit.
>>>
>>> I will give the Ohmites a try but will also order more of the flame proof
>>> resistors from Dave to replenish my stock.
>>>
>>> Ken
>>> WA2LBI
>>>
>>>
>
> [Non-text portions of this message have been removed]
>
>
>

> ------------------------------------
>
> Yahoo! Groups Links
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12603. Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 20:33:55 UTC
From: VE3UK Bob
Topic: 12572 Message: 12603

Well the actual TR-44 (of which I have a complete unmolested TR-44B) are definitely rare, but not sure how rare... I know they exists in a few hands that frequent this group, however, to be honest, mine is the only one that I have ever seen live. I never see them for sale.

73 Bob VE3UK

--- In DrakeRadio@yahoogroups.com, Steve Wedge <w1es1982@...> wrote:
>
> That is the one. How rare are they?
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On Mar 13, 2013, at 11:06 PM, "VE3UK Bob" <leschyna@...> wrote:
>
> > If you are talking about the stacked R4B/T4B that just sold on EvilBay for $414, that was NOT a TR-44B.
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> > >
> > > So, how scarce, exactly, are these things? The last one that was up on eBay (admittedly - it was a 9.8/10) went for nearly $1500.
> > >
> > > Opinions?
> > >
> > > 73,
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> > > Steve Wedge, W1ES/4
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> > > "I can't complain, but sometimes I still do."
> > > - Joe Walsh
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> > > [Non-text portions of this message have been removed]
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> >
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> [Non-text portions of this message have been removed]

>

12604. TR-4 15m coils for TX adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 21:13:31 UTC
From: JoÃ£o Lopes
Topic: 12604 Message: 12604

Dear friends.
I friend of mine has a TR-4 with a pair of fixed coils (no adjustments) for 15m. Other colleague told us that should be have a ferrite inside this simple coils glued internally. According him for 11 meter mod people take out these ferrites?

Is it real?

The problem is that 15m in his radio tx is weak, only 40W maximum.

Can you give some support?

regards and 73s.

Lopes - PY2SM

12605. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 21:33:26 UTC
From: Steve Wedge
Topic: 12572 Message: 12605

Next question: what's the difference between what was on eBay and a TR-44B?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: VE3UK Bob
Sent: Thursday, March 14, 2013 4:33 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Okay, so how rare are they?

Well the actual TR-44 (of which I have a complete unmolested TR-44B) are definitely rare, but not sure how rare... I know they exists in a few hands that frequent this group, however, to be honest, mine is the only one that I have ever seen live. I never see them for sale.

73 Bob VE3UK

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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12606. Re: RV-4C VFO knob semi-difficult to turn

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-14 22:01:41 UTC
From: slowcountry1
Topic: 12573 Message: 12606

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> If you haven't already seen this, give it a look.
>
> <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > As I am returning my Drake equipment to service, I pulled my RV-4C out of the closet. I purchased it 10 years ago tested it, placed it in the closet and never used it. The VFO knob turned very harshly so I disassembled the dial / gear assembly, replaced the bearing grease, cleaned the dials etc. The VFO knob turns much smoother however; it still has a significant amount of resistance and a little bit of "jerking" at points. With the dials removed, everything turns very smooth. I added the slightest film of petroleum jelly between the dials and the plastic disc that separates them. In addition, I set out the locking ring just a touch. This helped some however; it is still not anywhere near as smooth as expected. All of the gears are plastic which I did not grease. The main resistance seems to be between the dials.
> >
> > When I did the a fore mentioned treatment to my TR-4Cw, the VFO now turns like a dream; granted it uses brass gears and such. I'm not sure if this is just normal for the RV-4C or if something else is amiss. The previous owner had the VFO knob and selector switch set in too far causing scars on the face. I'm wondering if something else was left out of order however; I do not see anything obvious.
> >
> > I really don't expect to use the RV-4C much, but it needs to be set up with the rest of the gear. I figured it should work as good as I can make it. Any suggestions would be appreciated.
> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
> >
>
Garey,

Thanks again. I'm not sure why my Google search did not produce this website; I had totally forgotten about his site and its resources.

I followed his advice and ended up with a much smoother VFO. It still isn't quite as "silky" as the TR-4Cw but its very close; as close as I'm going to get it anyway.

This weekend, I hope to inspect the L-4 amp; I replaced the caps and diodes before I put it to rest 8 years ago. I need to open everything up and blow the dust and debris out. I need to replace the seal on the pressurized air compartment as It was on its last leg when I last used it. I need to check the fan to see if it needs any care. Should I inspect anything prior to putting it into service? The tubes are date code 1968 so its going to be a crap shoot if they have held their vacuum; really hoping there are no arcs.

This will complete the setup of this Drake station. I have three other TR-4's and one TR-6 to go through however; that's for later in the summer.

Thanks for all you do for the ham community,

Doug Coffman
N9XTF

12607. RE: [DrakeRadio] 39.1 MHz Crystal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 01:30:15 UTC
From: Joel Levy
Topic: 12555 Message: 12607

Al- I do have one available. Price is $14 shipped to you. 73, Joel AE2JL

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Al
Sent: Wednesday, March 13, 2013 10:48 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] 39.1 MHz Crystal

I was wondering if anyone has a 39.1 MHz crystal they are willing to part with at a reasonable price.
My R-4A only has a crystal for the 28.5 to 29.0 MHz part of the 10 meter band. I would like to receive on 28.0 to 28.5, which has much more activity.

Thanks,
Al, WA2S

[Non-text portions of this message have been removed]

12608. Re: [DrakeRadio] Re: RV-4C VFO knob semi-difficult to turn

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 02:06:53 UTC
From: Garey Barrell
Topic: 12573 Message: 12608

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> If you haven't already seen this, give it a look.
>>
>> <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm>
>>
>> 73, Garey - K4OAH
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>
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>>>
>>> I really don't expect to use the RV-4C much, but it needs to be set up with the rest of the gear. I figured it should work as good as I can make it. Any suggestions would be appreciated.
>>>
>>> Thanks,
>>>
>>> Doug Coffman
>>> N9XTF
>>>
>>>
> Garey,

>
> Thanks again. I'm not sure why my Google search did not produce this website; I had totally forgotten about his site and its resources.
>
> I followed his advice and ended up with a much smoother VFO. It still isn't quite as "silky" as the TR-4Cw but its very close; as close as I'm going to get it anyway.
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> This will complete the setup of this Drake station. I have three other TR-4's and one TR-6 to go through however; that's for later in the summer.
>
> Thanks for all you do for the ham community,
>
> Doug Coffman
> N9XTF
>
Doug -

No, just run the filaments for a couple of hoursbefore applying HV. Probably not necessary, but
can't hurt.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12609. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 03:03:35 UTC
From: VE3AX/7
Topic: 12572 Message: 12609

Steve:

The stacked set that was on epay was simply a standard R-4B and T-4XB in a CA-1 Stacking Cabinet. You remove the top cabinet of the R-4B leaving the bottom in place, mount the CA-1 in place of the receiver cabinet top, remove the bottom of the transmitter and mount the tx on top of the CA-1. Result is what you saw. You still need to add an external speaker and of course an AC-4. Typically the tx/rx connecting cables are the standard ~3 foot cables you see with any B/C line.

The TR-44B was a special version of the above assembly that eliminated the transmitter's VFO and replaced it with a speaker/grill that is almost identical to what you see in an RV-4 or RV-4C. It uses a special transmitter cabinet top that has a snap out cover on the right side (as you face the unit) that has (I believe – not at home to check) 10 spare 5 Mhz VFO xtal positions. These are switched from the front panel in the same place where the 4 position auxiliary dial range switch is on the T-4XB. A switch on the front panel selects the RCV VFO or the Xtals for tx frequency. A pilot light indicates non-R4B VFO control.

There is an RCA jack mounted in one of the spare holes on the back of the transmitter for connecting the speaker cable from the receiver. The tx/rx connecting cables are all short – about 6 or 8" long only – no need for long ones of course as they are always together.

There is a metal label on the side that states this is a TR-44B Communications Station. See Bob, VE3UK's, pics of a real TR-44B in the files section of this group.

The TR-44B was used for many government agencies and civil defense units, as I understand, but I am sure there are others on here that can shed further or more accurate history. There seemed to be a lot of them used in Ohio. They do show up on the auction sites fairly often and prices vary wildly.

The TR-44C version is MUCH more rare. I know of only three, including mine. Mine came with evidence that it was used at an Austrian embassy in Cairo, Egypt. It is on almost every evening. Will try to post some pics to the files section next week. Sindre had some on his and JM Cherry's web site but Sindre's new site doesn't yet have a pic of it, or didn't at last check a few weeks ago.

I have never seen a T-4B reciter, which is essentially the transmitter part of the TR-44B, but I suspect it does not have the speaker/grill like it's counterpart in the TR-44B. Of course I could be wrong on that assumption. I know the earlier T-4 Reciter had no speaker/grill. As far as I know there was no TR-44 Comm station predating the TR-44B, although it is not uncommon to see an R-4 or R-4A and T-4 Reciter mounted in a CA-1 stacking cabinet.

I'm doing all his from memory – hope it's mostly correct!

73
Peter
VE3AX/7

From: Steve Wedge
Sent: Thursday, March 14, 2013 2:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Next question: what's the difference between what was on eBay and a TR-44B?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: VE3UK Bob
Sent: Thursday, March 14, 2013 4:33 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Re: Okay, so how rare are they?

Well the actual TR-44 (of which I have a complete unmolested TR-44B) are definitely rare, but not sure how rare... I know they exists in a few hands that frequent this group, however, to be honest, mine is the only one that I have ever seen live. I never see them for sale.

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12610. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 12:37:36 UTC
From: Sindre Torp
Topic: 12572 Message: 12610

Hi everybody,

Peter VE3AX/7 explains the differencies between the TR-44, TR-44B and TR-44C very well ! There was actually a TR-44 predating the more common TR-44B, but it used the T-4 reciter without any speaker grill as explained. The label says TR-44!
I have never seen any T-4 with the speaker grill, and I have never seen any T-4B without the grill either.

The TR-44C is probably the most rare of the three versions mentioned above. I have one myself with the metal modeltype label on the side.
All my TR-44 versions come from Sweden. The Swedish Ministry of Foreign Affairs used them on all of their embassies around the world. The most common were the TR-44B in conjuntion with teletype equipment made by TeleTrading in Denmark. These units were housed in cabinets of the same size as the 4-line by the way. Looks very nice indeed.
They got only one TR-44C from Drake, but that one was never put into service.

Drake delivered different setups for Sweden on demand: a few TR-44B's but with the T-4XB transmitter; so the TR-44B version from Drake with the T-4XB and R-4B did come from the factory in limited quantity. And at the embassy in Moscow Sweden had a special TR-44B with the SPR-4 receiver instead of the R-4B.
I have all units in my collection thanks to a very good contact that I had in the department of state in Stockholm.

I'm going to present all the equipment at The Virtual Drake Museum. I have not had much time lately to work with that one by the way. But that will change to the better for me. I'm ending my job as editor of The Norwegian Hamradio Magazine issued by NRRL by the end of May. I'm going to spend a lot more time working with the museumsite after that.

73,
Sindre/LA6OP
www.drakemuseum.com

----- Original Message -----
From: VE3AX/7
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 15, 2013 4:03 AM
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Steve:

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I'm doing all his from memory – hope it's mostly correct!

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Peter
VE3AX/7

From: Steve Wedge
Sent: Thursday, March 14, 2013 2:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Next question: what's the difference between what was on eBay and a TR-44B?

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From: VE3UK Bob
Sent: Thursday, March 14, 2013 4:33 PM

To: mailto:DrakeRadio%40yahoogroups.com
Subject: [DrakeRadio] Re: Okay, so how rare are they?

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12611. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 12:59:05 UTC
From: Steve Wedge
Topic: 12572 Message: 12611

Thanks, Peter. Now I do recall hearing that description. Someone on this list - can't remember if it was Bob or Pete - had a T-4B, which is also a rare bird. Unfortunately, the one he owned had an extra hole in the front panel I believe it still went for a healthy amount of money.

You probably remember seeing that stacked set that was on eBay back in January, I believe it was. This one was in mint shape but the $1400+ sale price was eye-popping!

I'd suspect that a typical price for the stack would be somewhat more than a set of twins, so whoever won this one did get a good deal regardless.

Thanks for the info!

Steve Wedge, W1ES/4

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From: VE3AX/7
Sent: Thursday, March 14, 2013 11:03 PM
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There is an RCA jack mounted in one of the spare holes on the back of the transmitter for connecting the speaker cable from the receiver. The tx/rx connecting cables are all short – about 6 or 8" long only – no need for long ones of course as they are always together.

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I'm doing all his from memory – hope it's mostly correct!

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VE3AX/7

From: Steve Wedge
Sent: Thursday, March 14, 2013 2:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Next question: what's the difference between what was on eBay and a TR-44B?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

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12612. RE: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 13:48:18 UTC
From: wayne.smith
Topic: 12572 Message: 12612

You all have my attention now! So is the "TR-44C" I have real? or is it just stacked with the CA1 cabinet. Bought off eBay a couple years ago and the seller sold it as a TR-44C.

Thanks!

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Sindre Torp
Sent: Friday, March 15, 2013 7:38 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Hi everybody,

Peter VE3AX/7 explains the differencies between the TR-44, TR-44B and TR-44C very well ! There was actually a TR-44 predating the more common TR-44B, but it used the T-4 reciter without any speaker grill as explained. The label says TR-44!
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They got only one TR-44C from Drake, but that one was never put into service.

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Sindre/LA6OP
www.drakemuseum.com

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Sent: Friday, March 15, 2013 4:03 AM
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12613. Re: [DrakeRadio] TR-7 puzzlement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:11:16 UTC
From: Gary Woods
Topic: 12495 Message: 12613

Update:
It's always the dumb stuff....the translator board is a tight fit past a couple of screws that mount a shield cover, and it's really easy to slide it into it's compartment a skoshe angled, so the connector pins slide across the shields on the board and short things...
Finally figured it out, and replaced the +10 pass transistor (Thank you American microsemiconductor, speedy purveyors of "legacy" silicon). I can hear the calibrator and have RF out with the digital jumper board in place; not to put everything back together in stages and try not to mess anything else up on the way.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

12614. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:16:48 UTC
From: VE3AX/7
Topic: 12572 Message: 12614

Good morning everyone!

Sindre – good to hear from you! Great info indeed and thanks for the correction on the T-4B speaker. I wondered about that – I remember seeing ads for the T-4B reciter when I was a kid but have not seen one in a long time. Good info on the TR-44 too.

Wayne – if there is a metal tag on the (left?) side that is printed with TR-44C, then it's real. A "standard" TR-44C would have the RV-4C-like speaker and grill where the T-4XC VFO is and a 10 position "VFO" xtal switch bottom right corner as you face it, and the xtal door with 10 xtal sockets on the right side. The tx part is actually a T-4C Reciter. But as Sindre has stated, Drake made special units, at least in the B version, that included a full tx and rx with both VFO's. The metal tag (about 3" square) would be the best indicator.

Does it have short (6-8" long) connecting cables between tx and rx?

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12615. Re: [DrakeRadio] TR-7 puzzlement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:24:31 UTC
From: Keith Evans
Topic: 12495 Message: 12615

Hi Gary
I am glad you found it..
Its very easy to do,
73
Keith G3VKW

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From: Gary Woods
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 15, 2013 2:11 PM
Subject: Re: [DrakeRadio] TR-7 puzzlement

Update:
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couple of screws that mount a shield cover, and it's really easy to slide
it into it's compartment a skoshe angled, so the connector pins slide
across the shields on the board and short things...
Finally figured it out, and replaced the +10 pass transistor (Thank you
American microsemiconductor, speedy purveyors of "legacy" silicon). I can
hear the calibrator and have RF out with the digital jumper board in place;
not to put everything back together in stages and try not to mess anything
else up on the way.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

[Non-text portions of this message have been removed]

12616. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:26:30 UTC
From: VE3AX/7
Topic: 12572 Message: 12616

Wayne:

There is a pic of a TR-44C here:

http://www.mods.dk/picture.php?brandid=14&model=tr-44c

It doesn't show the short cables, or tx xtal deck/door but you can see the TR-44C label and the T-4C reciter/speaker.

73
Peter
VE3AX/7

From: VE3AX/7
Sent: Friday, March 15, 2013 7:16 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

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www.drakemuseum.com

----- Original Message -----
From: VE3AX/7
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Friday, March 15, 2013 4:03 AM
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Steve:

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There is an RCA jack mounted in one of the spare holes on the back of the transmitter for connecting the speaker cable from the receiver. The tx/rx connecting cables are all short – about 6 or 8" long only – no need for long ones of course as they are always together.

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I'm doing all his from memory – hope it's mostly correct!

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Peter
VE3AX/7

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Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

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12617. RE: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:31:39 UTC
From: wayne.smith
Topic: 12572 Message: 12617

Thanks for the info. Don't recall a tag but will look. The rig is actually in storage (non use just sitting on the desk) at my office across town. Not there at the moment. Yes it does have the short cables. If you have the photos i sent along with the email, you will see the back of the unit.

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of VE3AX/7
Sent: Friday, March 15, 2013 9:17 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Good morning everyone!

Sindre – good to hear from you! Great info indeed and thanks for the correction on the T-4B speaker. I wondered about that – I remember seeing ads for the T-4B reciter when I was a kid but have not seen one in a long time. Good info on the TR-44 too.

Wayne – if there is a metal tag on the (left?) side that is printed with TR-44C, then it’s real. A “standard” TR-44C would have the RV-4C-like speaker and grill where the T-4XC VFO is and a 10 position “VFO” xtal switch bottom right corner as you face it, and the xtal door with 10 xtal sockets on the right side. The tx part is actually a T-4C Reciter. But as Sindre has stated, Drake made special units, at least in the B version, that included a full tx and rx with both VFO’s. The metal tag (about 3” square) would be the best indicator.

Does it have short (6-8” long) connecting cables between tx and rx?

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To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: RE: [DrakeRadio] Re: Okay, so how rare are they?

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Thanks!

Wayne

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From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Sindre Torp
Sent: Friday, March 15, 2013 7:38 AM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

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12618. RE: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 14:38:20 UTC
From: wayne.smith
Topic: 12572 Message: 12618

Great photos. Seems mine may be just stacked units.

I wish there was a comprehensive serial number database so that the SN's could be referenced. My unit has RCV SN 25952 and the TX is 27404.

Other than the RCVR MODE knob not original, the rig is in great shape. No corrosion on the chassis as far as I can tell. There is a slight hum in the audio from the PS. Have not put it on the air. Need to do that.

Thanks!

Wayne

K5FEX

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of VE3AX/7
Sent: Friday, March 15, 2013 9:27 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Wayne:

There is a pic of a TR-44C here:

http://www.mods.dk/picture.php?brandid=14
<http://www.mods.dk/picture.php?brandid=14&model=tr-44c> &model=tr-44c

It doesn’t show the short cables, or tx xtal deck/door but you can see the TR-44C label and the T-4C reciter/speaker.

73
Peter
VE3AX/7

From: VE3AX/7
Sent: Friday, March 15, 2013 7:16 AM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
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12619. t4x for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:03:00 UTC
From: dalepavlicek
Topic: 12619 Message: 12619

Have a T4x sn#12330, Have seen NO mods. Have cleaned all pots and switches,went thru all the tubes .The rigs chassis is ok,some pitting ,as normal,front panel, as new,dial and vfo clear and smooth,all knobs are fine. Cabinet is good,origional,no dents.NO SMOKE. Put on bench,found no idle current,while testing. Have another working transmitter,so will sell this one. Should be a easy fix.
asking 150.00 split shipping. Please get back off line.
thanks
dale wt4t

12620. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:12:53 UTC
From: Garey Barrell
Topic: 12572 Message: 12620

Wayne -

Those are fairly late, mid 1977. Ended at about 30000.

<http://www.wb4hfn.com/DRAKE/DrakeSNDatabase-P3.htm>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

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12621. Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:06:19 UTC
From: Bobb
Topic: 12572 Message: 12621

I have a T-4B reciter and it does have the built-in speaker and grill. I use it with an R-4A and don't have the CA-1 stacking cabinet. Anyone want to sell a CA-1?

Bob W5GU

I have never seen a T-4B reciter, which is essentially the transmitter part of the TR-44B, but I suspect it does not have the speaker/grill like it's counterpart in the TR-44B. Of course I could be wrong on that assumption. I know the earlier T-4 Reciter had no speaker/grill. As far as I know there was no TR-44 Comm station predating the TR-44B, although it is not uncommon to see an R-4 or R-4A and T-4 Reciter mounted in a CA-1 stacking cabinet.

73
Peter
VE3AX/7

12622. TR-7 Dial question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:32:13 UTC
From: Gary Woods
Topic: 12622 Message: 12622

Well, everything is playing well with the digital jumper card in place, but I noticed that the analog dial disk that reads 100KHz increments is out of sync, I.e. when I hit bottom mechanically (gently...) the radio is a bit below 3500 on 80 meters, but the dial is reading about +150KHz. It goes quite above the top end before running out of travel. Everything is working smoothly, so I'm resisting the temptation to pull the PTO/dial assembly out. It doesn't look like the disk can be slipped on its shaft; at least pushing cautiously on the rim didn't do anything but make the associated gear try to turn. Is there an easier way before I muck it up?

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

12623. Re: [DrakeRadio] TR-7 Dial question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:53:09 UTC
From: Garey Barrell
Topic: 12622 Message: 12623

Gary -

There is a flat metal lever top right of the gearbox that when pushed to the left disengages the
dial from the gear train. Set to known frequency, then push lever and turn dial until correct.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Gary Woods wrote:
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> sync, I.e. when I hit bottom mechanically (gently...) the radio is a bit
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> working smoothly, so I'm resisting the temptation to pull the PTO/dial
> assembly out. It doesn't look like the disk can be slipped on its shaft; at
> least pushing cautiously on the rim didn't do anything but make the
> associated gear try to turn. Is there an easier way before I muck it up?
>
>

12624. TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 16:57:20 UTC
From: slowcountry1
Topic: 12624 Message: 12624

Garey brought up Neutralization on one of my earlier posts when I mentioned that I had 200 watts output on 10M. Today, I went through the neutralization process. I neutralized the PA at 29.0MHz as the manual states and was able to quickly adjust the C-76 capacitor for a dip in plate current coinciding with maximum output. 40 meters, 20 meters, 15 meters all dip at maximum output; 80 meters and 28.400 MHz, maximum output occurs above the dip in plate current.

The following output power and plate current readings were found after neutralization;

3.850 500ma plate current 210 watts output. Plate current dip at 480-490ma.

7.225 500ma plate current 210 watts output. Plate current dip and max power equal.

14.225 500ma plate current 205 watts output. Plat current dip and max power equal.

21.300 475ma plate current 200 watts output. Plate current dip and max power equal.

28.400 500ma plate current 160 watts output. Plate current dip around 450ma = 140 watts output.

29.000 450ma plate current 145 watts output. Plate current dip and max power equal

The rig has 3 Sylvania 6JB6 tubes installed. I am using an MFJ oil filled 50ohm resistive dummy load. Rig was left turned on for 2 hours prior to neutralization. C-76 is meshed just a tad over half way.

I really don't understand obtaining a neutralization at 29MHz but having it off on 28.400. Is the sweet spot narrow enough here that I just missed it? Is the neutralization close enough to be satisfactory or should I attempt to get 28.4 and 29.0 in the same area?

Thanks,

Doug Coffman
N9XTF

12625. Re: [DrakeRadio] TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 17:23:18 UTC
From: Garey Barrell
Topic: 12624 Message: 12625

Doug -

Those readings look a lot more reasonable. The times I have seen 'variable' neutralization, it's
been with mixed PA tubebrands. Since that doesn't seem to be the case here... To be honest, I
don't think I've ever done that thorough a job of checking neutralization! If it was just 10M,
I'dguess that you weren't _exactly_ on the spot. But beingoff on 80M doesn't fit that scenario.

If you are in an experimenting mood, you might try an alternate method of neutralization. One other
way is to remove Screen voltage from the PA stage, then key while monitoring with a receiver and
adjust the neutralization capacitor, then recheck on additional bands.

From a practical standpoint, I doubt if your current situation would cause trouble, just dip the
Plate current last when tuning up.

Let us know what you find!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
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> The rig has 3 Sylvania 6JB6 tubes installed. I am using an MFJ oil filled 50ohm resistive dummy load. Rig was left turned on for 2 hours prior to neutralization. C-76 is meshed just a tad over half way.
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> I really don't understand obtaining a neutralization at 29MHz but having it off on 28.400. Is the sweet spot narrow enough here that I just missed it? Is the neutralization close enough to be satisfactory or should I attempt to get 28.4 and 29.0 in the same area?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>

12626. Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 17:28:10 UTC
From: VE3UK Bob
Topic: 12572 Message: 12626

That's strange. When you mentioned the pictures that I uploaded, I decided to check on them and see that they are no longer there? How and why would they have been deleted? I will upload them again when I have some time.

Bob VE3UK

--- In DrakeRadio@yahoogroups.com, "Sindre Torp" <sindtorp@...> wrote:
>
> Hi everybody,
>
> Peter VE3AX/7 explains the differencies between the TR-44, TR-44B and TR-44C very well !
> There was actually a TR-44 predating the more common TR-44B, but it used the T-4 reciter without any speaker grill as explained. The label says TR-44!
> I have never seen any T-4 with the speaker grill, and I have never seen any T-4B without the grill either.
>
> The TR-44C is probably the most rare of the three versions mentioned above. I have one myself with the metal modeltype label on the side.
> All my TR-44 versions come from Sweden. The Swedish Ministry of Foreign Affairs used them on all of their embassies around the world. The most common were the TR-44B in conjuntion with teletype equipment made by TeleTrading in Denmark. These units were housed in cabinets of the same size as the 4-line by the way. Looks very nice indeed.
> They got only one TR-44C from Drake, but that one was never put into service.
>
> Drake delivered different setups for Sweden on demand: a few TR-44B's but with the T-4XB transmitter; so the TR-44B version from Drake with the T-4XB and R-4B did come from the factory in limited quantity. And at the embassy in Moscow Sweden had a special TR-44B with the SPR-4 receiver instead of the R-4B.
> I have all units in my collection thanks to a very good contact that I had in the department of state in Stockholm.
>
> I'm going to present all the equipment at The Virtual Drake Museum. I have not had much time lately to work with that one by the way. But that will change to the better for me. I'm ending my job as editor of The Norwegian Hamradio Magazine issued by NRRL by the end of May. I'm going to spend a lot more time working with the museumsite after that.
>
> 73,
> Sindre/LA6OP
> www.drakemuseum.com
>
> ----- Original Message -----
> From: VE3AX/7
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, March 15, 2013 4:03 AM
> Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?
>
>
>

> Steve:
>
> The stacked set that was on epay was simply a standard R-4B and T-4XB in a CA-1 Stacking Cabinet. You remove the top cabinet of the R-4B leaving the bottom in place, mount the CA-1 in place of the receiver cabinet top, remove the bottom of the transmitter and mount the tx on top of the CA-1. Result is what you saw. You still need to add an external speaker and of course an AC-4. Typically the tx/rx connecting cables are the standard ~3 foot cables you see with any B/C line.
>
> The TR-44B was a special version of the above assembly that eliminated the transmitterâ□□s VFO and replaced it with a speaker/grill that is almost identical to what you see in an RV-4 or RV-4C. It uses a special transmitter cabinet top that has a snap out cover on the right side (as you face the unit) that has (I believe â□" not at home to check) 10 spare 5 Mhz VFO xtal positions. These are switched from the front panel in the same place where the 4 position auxiliary dial range switch is on the T-4XB. A switch on the front panel selects the RCV VFO or the Xtals for tx frequency. A pilot light indicates non-R4B VFO control.
>
> There is an RCA jack mounted in one of the spare holes on the back of the transmitter for connecting the speaker cable from the receiver. The tx/rx connecting cables are all short â□" about 6 or 8â□□ long only â□" no need for long ones of course as they are always together.
>
> There is a metal label on the side that states this is a TR-44B Communications Station. See Bob, VE3UKâ□□s, pics of a real TR-44B in the files section of this group.
>
> The TR-44B was used for many government agencies and civil defense units, as I understand, but I am sure there are others on here that can shed further or more accurate history. There seemed to be a lot of them used in Ohio. They do show up on the auction sites fairly often and prices vary wildly.
>
> The TR-44C version is MUCH more rare. I know of only three, including mine. Mine came with evidence that it was used at an Austrian embassy in Cairo, Egypt. It is on almost every evening. Will try to post some pics to the files section next week. Sindre had some on his and JM Cherryâ□□s web site but Sindreâ□□s new site doesnâ□□t yet have a pic of it, or didnâ□□t at last check a few weeks ago.
>
> I have never seen a T-4B reciter, which is essentially the transmitter part of the TR-44B, but I suspect it does not have the speaker/grill like itâ□□s counterpart in the TR-44B. Of course I could be wrong on that assumption. I know the earlier T-4 Reciter had no speaker/grill. As far as I know there was no TR-44 Comm station predating the TR-44B, although it is not uncommon to see an R-4 or R-4A and T-4 Reciter mounted in a CA-1 stacking cabinet.
>
> Iâ□□m doing all his from memory â□" hope itâ□□s mostly correct!
>
> 73
> Peter
> VE3AX/7
>
> From: Steve Wedge
> Sent: Thursday, March 14, 2013 2:33 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?
>
> Next question: what's the difference between what was on eBay and a TR-44B?
>

> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: VE3UK Bob
> Sent: Thursday, March 14, 2013 4:33 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: [DrakeRadio] Re: Okay, so how rare are they?
>
> Well the actual TR-44 (of which I have a complete unmolested TR-44B) are definitely rare, but not sure how rare... I know they exists in a few hands that frequent this group, however, to be honest, mine is the only one that I have ever seen live. I never see them for sale.
>
> 73 Bob VE3UK
>
> --- In mailto:DrakeRadio%40yahoogroups.com, Steve Wedge <w1es1982@> wrote:
> >
> > That is the one. How rare are they?
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> >
> > On Mar 13, 2013, at 11:06 PM, "VE3UK Bob" <leschyna@> wrote:
> >
> > > If you are talking about the stacked R4B/T4B that just sold on EvilBay for $414, that was NOT a TR-44B.
> > >
> > > --- In mailto:DrakeRadio%40yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
> > > >
> > > > I can't believe I missed winning the latest "TR-44B" by only about $40. It sold for under $500 - which is less than a decent set of B-Twins normally brings!
> > > >
> > > > So, how scarce, exactly, are these things? The last one that was up on eBay (admittedly - it was a 9.8/10) went for nearly $1500.
> > > >
> > > > Opinions?
> > > >
> > > > 73,
> > > >
> > > > Steve Wedge, W1ES/4
> > > >
> > > > "I can't complain, but sometimes I still do."
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12627. Re: [DrakeRadio] Re: Okay, so how rare are they?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 20:54:18 UTC
From: Sindre Torp
Topic: 12572 Message: 12627

I have to come up with a correction to myself regarding the special TR-44B I mentioned used at the Swedish embassy in Moscow:
It is actually a special version of the TR-44C! It consist of the T-4C and the SPR-4 receiver delivered by Drake on special order from Sweden. I took a closer look at my different TR-44 versions this afternoon.

I have total three T-4C's:
one in the standard TR-44C, one in the unit mentioned above and a single stand-alone T-4C transmitter.

The serial numbers on my T-4C's are: 0532, 0547 and 0576.
I have no further info about the serial numbers of the T-4C's, or how many that actually were made.
But it seems to me that the serial numbers of the T-4, T-4B and T-4C are connected in the same number-row, in the same way like for example the TR-4, TR-4C, TR-4CW, TR-4CW/RIT.

My T-4's serial numbers are: 0009, 0103 and 0127
My T-4B's serial numbers are: 0308G, 0387B, 0459B and 0497B
and again the T-4C's: 0532, 0547 and 0576.

The serial numbers indicate how many that were made. Interesting, don't you think!?

73,
Sindre, LA6OP

----- Original Message -----
From: Sindre Torp
To: DrakeRadio@yahoogroups.com
Sent: Friday, March 15, 2013 1:37 PM
Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

Hi everybody,

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Sent: Friday, March 15, 2013 4:03 AM
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Steve:

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Subject: Re: [DrakeRadio] Re: Okay, so how rare are they?

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12628. Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 21:05:02 UTC
From: slowcountry1
Topic: 12624 Message: 12628

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Those readings look a lot more reasonable. The times I have seen 'variable' neutralization, it's
> been with mixed PA tubebrands. Since that doesn't seem to be the case here... To be honest, I
> don't think I've ever done that thorough a job of checking neutralization! If it was just 10M,
> I'dguess that you weren't _exactly_ on the spot. But beingoff on 80M doesn't fit that scenario.
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> If you are in an experimenting mood, you might try an alternate method of neutralization. One other
> way is to remove Screen voltage from the PA stage, then key while monitoring with a receiver and
> adjust the neutralization capacitor, then recheck on additional bands.
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> From a practical standpoint, I doubt if your current situation would cause trouble, just dip the
> Plate current last when tuning up.
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> Let us know what you find!!
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
>

Garey,

At some point, in the near future, I will go through it again and see if I can find a sweet spot. As long as it does not cause an issue I will use it as is, for now.

I opened up the covers on the L4 and L4-PS this morning just to make sure everything was in order. I replaced the air box seal as it was vaporized. The power switch / CW/SSB switch was replaced by the previous owner; I found that the wires were soldered but just not to the switch. They were through the contact holes and soldered they just didn't heat the tabs to flow the solder. I corrected that and fired the old girl up. I was pleasantly surprised that it tuned right up without tube flashes or component arcing. The tubes are date code 1968 3-400's.

The power supply transformer settings are for 230VAC however; my line voltage is a consistent 245VAC. The CW voltage shows 2100 volts and the SSB voltage shows a tad shy of 3000 volts. Tuned up as prescribed, in SSB operation, a whistle or voice peaks on my peak reading meter indicate almost 1300 watts output. This is great for an old set of tubes and I'm sure that's about 200 to 300 watts more that it was designed for. The increased line voltage is behind the increased output.

I went back through some old information that Steve Katz, WB2WIK, sent me back in 2004 regarding questions I had on this amplifier. I need to verify that the increased line voltage hasn't increased the filament voltage out of its safe range and I need to verify the high voltage readings. Other than that, all seems good.

All in all, everything is working great for the time being. Your CD's and helpful information has been indispensable returning my gear back to service. Thanks again,

Doug Coffman
N9XTF

12629. Re: [DrakeRadio] Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 01:55:28 UTC
From: Garey Barrell
Topic: 12624 Message: 12629

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Those readings look a lot more reasonable. The times I have seen 'variable' neutralization, it's
>> been with mixed PA tubebrands. Since that doesn't seem to be the case here... To be honest, I
>> don't think I've ever done that thorough a job of checking neutralization! If it was just 10M,
>> I'dguess that you weren't _exactly_ on the spot. But beingoff on 80M doesn't fit that scenario.
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>> If you are in an experimenting mood, you might try an alternate method of neutralization. One other
>> way is to remove Screen voltage from the PA stage, then key while monitoring with a receiver and
>> adjust the neutralization capacitor, then recheck on additional bands.
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>> From a practical standpoint, I doubt if your current situation would cause trouble, just dip the
>> Plate current last when tuning up.
>>
>> Let us know what you find!!
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>> 73, Garey - K4OAH
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3-400Zs. A bucking transformer on either the 240 input or just on the filament/bias transformer
would be a good idea. The filament needs to be +/- 5%, closer the better. The increased high
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Glen Allen, VA

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12630. Low TX on 10 mtrs TR4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-15 23:30:13 UTC
From: milton_valerio
Topic: 12630 Message: 12630

Hi group, I am having problems with a TR4C with a very low power output on 10 mtrs, also 15 is not that great but at least is 50W on 10 what I get is roughly 5W.
Also the reception on this band is quite low in comparison to 40, 20 or 80 where power is almost 200W
I aligned it as per manual but no good results on 10.
Tubes are brand new and neutralization has been done on 15M
Any help or advice is welcome.

12631. Re: My TR-7 changes frequency without my help.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 05:36:38 UTC
From: Carl Maniscalco
Topic: 12501 Message: 12631

Just thought I'd let you all know that I followed Steve's suggestion about cleaning up the connectors on the DR7 module and it did indeed take care of the problem. I had the rig on for over an hour with no change of frequency (other than the normal amount of drift you'd expect from a rig of that age) and the UP and DOWN buttons are back to working in 500 kHz increments, as they should.

A little note that you might find interesting: I have an original factory printed service manual for the TR7 (in the blue Drake binder) and the instructions on how to remove the DR7 board neglect to mention that you have to remove a screw before you can pull the board. In fact, there is photograph included which demonstrates the use of a board puller shows the operation being done with the screw still in place! Fortunately, I decided that it shouldn't take that much effort and removed the screw before the PCB cracked.

73,

Carl, KJ6BSO

Okay, thank you for your advice. I'll try the fix this weekend and get back to the group to let you know how it turns out.

73,

Carl, KJ6BSO

My TR7 did this to me a month ago - like many others here I found that cleaning the pins and sockets on the cards located under the DR7 board fixed the problem. You'll need lots of patience to get the DR7 out, take off the cover over the cards that are under it and remove each card one at a time. Spray the Molex pins with De-Oxit, wipe clean, spray a tiny bit of De-Oxit into the socket the board mounts to, give it some time to evaporate, and then reinstall the card. I did the whole procedure over several nights but I am really slow.

Steve
KD2ed

In a message dated 3/11/2013 9:23:56 P.M. Eastern Daylight Time,
kj6bso@... writes:

Hello, all--

My TR-7 recently developed a glitch: It works properly when I first turn it on but after about ten minutes, the tuned frequency will drop exactly 500 kHz. Once this has happened, pressing either the "UP" or "DOWN" keys, changes the frequency in 1 MHz increments rather than the normal 500 kHz step, although the LED display will flash the 500 kHz increment for a fraction of

a second on the way past. A quick off-on power cycle doesn't eliminate the problem; letting it sit overnight does, which leads me to believe it's a thermal issue. I have not yet had the opportunity to test how long it needs to be powered down before it returns to normal operation.

Any ideas on why this is happening and how I might go about fixing it?

73,

Carl, KJ6BSO

Carl Maniscalco, KJ6BSO

12632. Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 13:28:33 UTC
From: slowcountry1
Topic: 12624 Message: 12632

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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> >>> N9XTF
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Garey,

Prior to measuring the filament voltage on the 3-400's, I have done some research. The following site http://www.w8ji.com/filament_voltage_life.htm indicates a test method for monitoring the voltages. The test procedure employs Series components; 220 µH RF chokes and Shunt component is .1 µF capacitor. Looking at the picture it looks like two resistors with a shunt capacitor, I do not see any chokes in this setup.

What would be the best way to check the filament voltage on the L-4. I'm assuming I need to check it at power up, after the filaments have had time to warm up and then during full power transmission.

What are your recommendations here?

Thanks,

Doug Coffman
N9XTF

12633. TR-4Cw PTO Grounding

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 13:59:33 UTC
From: slowcountry1
Topic: 12633 Message: 12633

While surfing WB4HFN's website, I came across an article regarding PTO grounding on the TR-4. What issues does this resolve and does this apply to the TR-4Cw or were the issues rectified in the later models?

Thanks,

Doug Coffman
N9XTF

12634. L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 14:07:47 UTC
From: slowcountry1
Topic: 12634 Message: 12634

The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?

Thanks,

Doug Coffman
N9XTF

12635. Re: [DrakeRadio] Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 15:00:06 UTC
From: Garey Barrell
Topic: 12624 Message: 12635

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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Doug -

If you have it on it's own 240V drop, adequately sized, I wouldn't worry too much about under load
measurements. You say your drop is a little high, so I'd set it just a bit above 5.00Vassuming your

power company is doing its job.

The 'correct' way to do it is to monitor the 240V over a few days with a recording voltmeter,
(Dranetz, etc.,) average the reading, and assuming it stays within +/- 5% or less, set the filament
voltage to the nominal value for 5.00V.

From a practical standpoint, check the 240V at minand max load times, an hour or two before dinner
time on a hot day, 4:00 o'clock in the morning, etc. and average that out.

I don't see any need to go through all the hassle to measure filament voltage at the tube under
load. Makes more sense to relate the 5.00V to the primary voltage and then measure the primary
under load.

73, Garey - K4OAH
Glen Allen, VA

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12636. Re: [DrakeRadio] Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 15:17:34 UTC
From: Garey Barrell
Topic: 12624 Message: 12636

Doug -

I just readJI's page. Seems well researched, and makes sense.

The 'True RMS' meter is probably not that important IF you have clean sine wave power. If you got
it, certainly useit, but I wouldn't buy a meter just for this!

Those ARE RF chokes in the photo, and that is a reasonable way to measure under load. I still think
percentage variation of the primary voltage is going to be close enough.

All in all, sounds like much ado over nothing. Set the voltagea little high, no load, and confirm it
doesn't dropbelow recommended voltage under worst case line variations.

73, Garey - K4OAH
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>>>
>>> I opened up the covers on the L4 and L4-PS this morning just to make sure everything was in order. I replaced the air box seal as it was vaporized. The power switch / CW/SSB switch was replaced by the previous owner; I found that the wires were soldered but just not to the switch. They were through the contact holes and soldered they just didn't heat the tabs to flow the solder. I corrected that and fired the old girl up. I was pleasantly surprised that it tuned right up without tube flashes or component arcing. The tubes are date code 1968 3-400's.
>>>
>>> The power supply transformer settings are for 230VAC however; my line voltage is a consistent 245VAC. The CW voltage shows 2100 volts and the SSB voltage shows a tad shy of 3000 volts. Tuned up as prescribed, in SSB operation, a whistle or voice peaks on my peak reading meter indicate almost 1300 watts output. This is great for an old set of tubes and I'm sure that's about 200 to 300 watts more that it was designed for. The increased line voltage is behind the increased output.
>>>
>>> I went back through some old information that Steve Katz, WB2WIK, sent me back in 2004 regarding questions I had on this amplifier. I need to verify that the increased line voltage hasn't increased the filament voltage out of its safe range and I need to verify the high voltage readings. Other than that, all seems good.
>>>
>>> All in all, everything is working great for the time being. Your CD's and helpful information has been indispensable returning my gear back to service. Thanks again,
>>>
>>> Doug Coffman
>>> N9XTF
>>>
>>>
>> Doug -
>>
>> Cool! Yep, that is a rugged amplifier. I would be concerned about the filament voltage on the
>> 3-400Zs. A bucking transformer on either the 240 input or just on the filament/bias transformer
>> would be a good idea. The filament needs to be +/- 5%, closer the better. The increased high
>> voltage isn't really a problem, UNLESS it gets too close to the capacitor ratings.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
> Garey,
>
> Prior to measuring the filament voltage on the 3-400's, I have done some research. The

following site http://www.w8ji.com/filament_voltage_life.htm indicates a test method for monitoring the voltages. The test procedure employs Series components; 220 ?H RF chokes and Shunt component is .1 ?F capacitor. Looking at the picture it looks like two resistors with a shunt capacitor, I do not see any chokes in this setup.
>
> What would be the best way to check the filament voltage on the L-4. I'm assuming I need to check it at power up, after the filaments have had time to warm up and then during full power transmission.
>
> What are your recommendations here?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
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> Yahoo! Groups Links
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12637. Re: [DrakeRadio] TR-4Cw PTO Grounding

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 15:22:34 UTC
From: Garey Barrell
Topic: 12633 Message: 12637

slowcountry1 wrote:
> While surfing WB4HFN's website, I came across an article regarding PTO grounding on the TR-4. What issues does this resolve and does this apply to the TR-4Cw or were the issues rectified in the later models?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
Doug -

It applies to ALL Drake PTOs. Originally the lead screw/tuning slug was grounded through the front
ball bearing, and the follower lying against the rider bar at the top. The bearing path began to
show problemswhen the original grease hardened and became 'crunchy', ('jittery frequency when
tuning',) and the riderbar was compromised by oiling and dirt.

The braid makes a nice, steady ground connection and resolves those problems

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12638. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 15:25:24 UTC
From: Garey Barrell
Topic: 12634 Message: 12638

slowcountry1 wrote:
> The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
>
>
Doug -

The L-4B accomplishes this by replacing the VOX control with one having a 'push-pull' power switch.
The switch is used to break the 30 VDC relay control line.

Many guitar controls have push-pull power switches on them. No voltage or current concerns.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12639. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 16:47:09 UTC
From: Keith Evans
Topic: 12634 Message: 12639

Hi Doug,
I have a L4B, and that has the ALC adjusting pot and switch, By pushing it in or out, it puts the amp on standby or operate.
Not sure for the L4, but possibly it could be added fairly easily.
73
Keith G3VKW

----- Original Message -----
From: slowcountry1
To: DrakeRadio@yahoogroups.com
Sent: Saturday, March 16, 2013 2:07 PM
Subject: [DrakeRadio] L-4 amplifier add standby

The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?

Thanks,

Doug Coffman
N9XTF

[Non-text portions of this message have been removed]

12640. Re: L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 16:55:37 UTC
From: k9sqg
Topic: 12634 Message: 12640

The L4 ALC control is on the rear panel. There is no standby switch on the L4 amplifier although an external one can be easily added. Several companies make PTT/standby switches designed to interface vintage amplifiers with the newer rigs that have been designed to handle only low voltage and low current relays. These external interfaces often have a standby switch on them.

It is best to save the on/off switch by using it as little as possible. An external on/off switch is preferred. And in spite of what many companies claim, the 3-500Z is not an instant on tube.

Enjoy those Drakes.

73,

Evan, K9SQG

12641. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 17:45:20 UTC
From: GALE STEWARD
Topic: 12634 Message: 12641

I have a small aluminum minibox with a small toggle switch to open the PTT relay line to the amp. No need to drill any holes. I use this on my L4 only as my L4B has the built in standby switch.

73, Stew K3ND

From: slowcountry1 <dcoffman@...>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, March 16, 2013 10:07 AM
Subject: [DrakeRadio] L-4 amplifier add standby

The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?

Thanks,

Doug Coffman
N9XTF

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12642. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 18:36:49 UTC
From: Mike Bryce
Topic: 12634 Message: 12642

one of my ampkeyer interfaces would do the job nicely.

Mike, wb8vge

On Sat, Mar 16, 2013 at 11:25 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> slowcountry1 wrote:
> > The L-4 does not have a provision for "Standby" other than turning the
> power off to the amplifier. I turn the power on and off via the 220v
> breaker at the box to prevent damage to the power switch. Is there a method
> to add "standby" to the L-4?
> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
> >
> >
> Doug -
>
> The L-4B accomplishes this by replacing the VOX control with one having a
> 'push-pull' power switch.
> The switch is used to break the 30 VDC relay control line.
>
> Many guitar controls have push-pull power switches on them. No voltage or
> current concerns.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>
>

--
Mike, WB8VGE
SunLight Energy Systems
The Heathkit Shop
http://www.theheathkitshop.com/

J e e p
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[Non-text portions of this message have been removed]

12643. Re: L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 18:37:05 UTC
From: slowcountry1
Topic: 12634 Message: 12643

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> > The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?
> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
> >
> >
> Doug -
>
> The L-4B accomplishes this by replacing the VOX control with one having a 'push-pull' power switch.
> The switch is used to break the 30 VDC relay control line.
>
> Many guitar controls have push-pull power switches on them. No voltage or current concerns.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
Gary,

So all they are doing is breaking the connection between the VOX input to the amp and the transceiver? I was going to put a toggle switch inline between the AC4 VOX connector and the L4 VOX connector but was afraid something else needed to be disabled. Will a toggle switch suffice for this?

Thanks,

Doug Coffman
N9XTF

12644. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:00:37 UTC
From: Bernie
Topic: 12634 Message: 12644

Hey Mike....I LOVE the Amp-Keyer that I bought from you. I no longer have to lay awake nights wondering if I'm destroying the small keying relay in whatever rig I'm using to feed the amp. Been thinking of running the radio keying inputs (3 or 4) through a three or four position switch to select which rig is keying the amp instead of having to plug & unplug connectors. Also looking at doing likewise with the ALC line back to the respective rigs...for those that have an ALC feedback capability. For those rigs that don't, I just make sure I don't over-drive the amp with them. Do you see any difficulty in doing this? Please advise.
Bernie in ND
(Moderator - should I have changed the subject line on this query?)

----- Original Message -----
From: "Mike Bryce" <prosolar@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, March 16, 2013 1:36 PM
Subject: Re: [DrakeRadio] L-4 amplifier add standby

> one of my ampkeyer interfaces would do the job nicely.
>
> Mike, wb8vge
>
> On Sat, Mar 16, 2013 at 11:25 AM, Garey Barrell
> <k4oah@...>wrote:
>
>> **
>>
>>
>> slowcountry1 wrote:
>> > The L-4 does not have a provision for "Standby" other than turning the
>> power off to the amplifier. I turn the power on and off via the 220v
>> breaker at the box to prevent damage to the power switch. Is there a
>> method
>> to add "standby" to the L-4?
>> >
>> > Thanks,
>> >
>> > Doug Coffman
>> > N9XTF
>> >
>> >
>> >
>> Doug -
>>
>> The L-4B accomplishes this by replacing the VOX control with one having a

>> 'push-pull' power switch.
>> The switch is used to break the 30 VDC relay control line.
>>
>> Many guitar controls have push-pull power switches on them. No voltage or
>> current concerns.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>
> --
> Mike, WB8VGE
> SunLight Energy Systems
> The Heathkit Shop
> http://www.theheathkitshop.com/
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> Yahoo! Groups Links
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12645. Re: [DrakeRadio] WAS- L-4 amplifier add standby-Now Remote amp keyer (Sorta....)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:10:58 UTC
From: Joe
Topic: 12645 Message: 12645

Probably would have been a good idea...but I won't nick your paycheck this time! <<GRIN>>

Joe Wolfe - WA6RKN
Moderator

----- Original Message -----
From: "Bernie" <barcand@...>
Subject: Re: [DrakeRadio] L-4 amplifier add standby

> (Moderator - should I have changed the subject line on this query?)

12646. Re: [DrakeRadio] Re: L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:24:27 UTC
From: Garey Barrell
Topic: 12634 Message: 12646

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> slowcountry1 wrote:
>>> The L-4 does not have a provision for "Standby" other than turning the power off to the amplifier. I turn the power on and off via the 220v breaker at the box to prevent damage to the power switch. Is there a method to add "standby" to the L-4?
>>>
>>> Thanks,
>>>
>>> Doug Coffman
>>> N9XTF
>>>
>>>
>>>
>> Doug -
>>
>> The L-4B accomplishes this by replacing the VOX control with one having a 'push-pull' power switch.
>> The switch is used to break the 30 VDC relay control line.
>>
>> Many guitar controls have push-pull power switches on them. No voltage or current concerns.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
> Gary,
>
> So all they are doing is breaking the connection between the VOX input to the amp and the transceiver? I was going to put a toggle switch inline between the AC4 VOX connector and the L4 VOX connector but was afraid something else needed to be disabled. Will a toggle switch suffice for this?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
>
Doug-

Yes, that's all you need. I was thinking earlier that the L-4 had a front panel VOX control, just
no switch. But Evan is correct, the VOX control is on the rear panel. Not too convenient!

The VOX line only has about 30VDC on it, and takesabout 60 mA to closethe relay. So anytoggle
switch should handle it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12647. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:41:19 UTC
From: Garey Barrell
Topic: 12634 Message: 12647

Bernie -

Yeah, probably, but no big deal. We have a very adult group of people here!

As for your question, I don't see any problem doing that. Probably should use shielded wire,
especially for the ALC to avoid RF pickup.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
> Hey Mike....I LOVE the Amp-Keyer that I bought from you. I no longer have
> to lay awake nights wondering if I'm destroying the small keying relay in
> whatever rig I'm using to feed the amp. Been thinking of running the radio
> keying inputs (3 or 4) through a three or four position switch to select
> which rig is keying the amp instead of having to plug & unplug connectors.
> Also looking at doing likewise with the ALC line back to the respective
> rigs...for those that have an ALC feedback capability. For those rigs that
> don't, I just make sure I don't over-drive the amp with them. Do you see
> any difficulty in doing this? Please advise.
> Bernie in ND
> (Moderator - should I have changed the subject line on this query?)
>
>

12648. Fwd: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:47:00 UTC
From: Dan Galligan
Topic: 12648 Message: 12648

This was going to be my suggestion. The Heathkit Shop Ampkeyer Interface does a very nice job, and would easily handle your needs.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb
>
> The most frightening words in the English language-"I'm from the government, and I'm here to help"
> Reynaldus Magnus, aka President Ronald Wilson Reagan
>
> Sent from my somewhat brighter, larger, electronic leash.
>
> On Mar 16, 2013, at 11:36, Mike Bryce <prosolar@...> wrote:
>
>> one of my ampkeyer interfaces would do the job nicely.
>>
>> Mike, wb8vge
>>
>> On Sat, Mar 16, 2013 at 11:25 AM, Garey Barrell <k4oah@...>wrote:
>>
>>> **
>>>
>>>
>>> slowcountry1 wrote:
>>>> The L-4 does not have a provision for "Standby" other than turning the
>>> power off to the amplifier. I turn the power on and off via the 220v
>>> breaker at the box to prevent damage to the power switch. Is there a method
>>> to add "standby" to the L-4?
>>>>
>>>> Thanks,
>>>>
>>>> Doug Coffman
>>>> N9XTF
>>> Doug -
>>>
>>> The L-4B accomplishes this by replacing the VOX control with one having a
>>> 'push-pull' power switch.
>>> The switch is used to break the 30 VDC relay control line.
>>>
>>> Many guitar controls have push-pull power switches on them. No voltage or
>>> current concerns.
>>>

>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
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>> --
>> Mike, WB8VGE
>> SunLight Energy Systems
>> The Heathkit Shop
>> http://www.theheathkitshop.com/
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12649. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 19:52:52 UTC
From: Bernie
Topic: 12634 Message: 12649

Thanks, Garey,
I thought I'd mount the rotary switches in an aluminum project box, using RCA jacks in and out for both keying and ALC...and sheilded wire of course. Should be a fun project. Otherwise I could probably re-dedicate part of my patch panel for that purpose also. Thanks again.

Berie in ND
WD0GMD

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, March 16, 2013 2:41 PM
Subject: Re: [DrakeRadio] L-4 amplifier add standby

Bernie -

Yeah, probably, but no big deal. We have a very adult group of people here!

As for your question, I don't see any problem doing that. Probably should use shielded wire,
especially for the ALC to avoid RF pickup.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
> Hey Mike....I LOVE the Amp-Keyer that I bought from you. I no longer have
> to lay awake nights wondering if I'm destroying the small keying relay in
> whatever rig I'm using to feed the amp. Been thinking of running the radio
> keying inputs (3 or 4) through a three or four position switch to select
> which rig is keying the amp instead of having to plug & unplug connectors.
> Also looking at doing likewise with the ALC line back to the respective
> rigs...for those that have an ALC feedback capability. For those rigs that
> don't, I just make sure I don't over-drive the amp with them. Do you see
> any difficulty in doing this? Please advise.
> Bernie in ND
> (Moderator - should I have changed the subject line on this query?)
>
>

[Non-text portions of this message have been removed]

12650. TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 20:40:59 UTC
From: DANIEL
Topic: 12292 Message: 12650

Hello group:

I´m working in restoring a tr7. The pcb power supply is not working but I replaced with +24 and -5 vcc external power supply.

The display show me 51 (fixed) and the four digits (eg 110 .0) with decimal point.

I can change the frequency using vfo and receive some signal (internal xtal calibrator) but the up and down buttom dont work and the bands seems to be out of frequency (3mhz. down).

I cleaned all related connectors with dr7.

I checked the input bcd signals to digital control board from the band switch and is ok.

The output from control pcb to dr7 dont match with the correct data to change band (N number) so I suspect in a bad function in this pcb.

I would appreciate any help.

LU5EMM

Daniel

Mar del Plata

Bs.As. ARGENTINA

12651. Re: [DrakeRadio] TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 20:55:56 UTC
From: Garey Barrell
Topic: 12292 Message: 12651

Daniel -

The attached may help. With the 'Jumper' board, (part of the extender board kit,) or the same pins
along the left-hand side of the DR-7 board.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

DANIEL wrote:
> Hello group:
>
> I´m working in restoring a tr7. The pcb power supply is not working but I replaced with +24 and -5 vcc external power supply.
>
> The display show me 51 (fixed) and the four digits (eg 110 .0) with decimal point.
>
> I can change the frequency using vfo and receive some signal (internal xtal calibrator) but the up and down buttom dont work and the bands seems to be out of frequency (3mhz. down).
>
> I cleaned all related connectors with dr7.
>
> I checked the input bcd signals to digital control board from the band switch and is ok.
>
> The output from control pcb to dr7 dont match with the correct data to change band (N number) so I suspect in a bad function in this pcb.
>
> I would appreciate any help.
>
> LU5EMM
>
> Daniel
>
> Mar del Plata
>
> Bs.As. ARGENTINA
>
>

[Non-text portions of this message have been removed]

12652. Re: [DrakeRadio] L-4 amplifier add standby

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 20:56:22 UTC
From: Dan Galligan
Topic: 12634 Message: 12652

Bernie,
Maybe even an old rotary antenna switch, would work. You'd likely want to change out the SO-239's, for RCA's, or something better, but a decent rotary antenna switch, like an old B&W or Heath, would do the trick.
See now, you got me started thinking, now my feeble old brain is hurting!

Garey,
It sure is nice to have a group of adults, who don't get their underwear in a bunch, over small errors, off topic subjects, and other things easily remedied, by the DELETE button, like other reflectors are populated with.

73,
Dan
W3RXO/6
Pomona, CA
DM14cb

It is said that in a tough economy, investing in precious metals, is financially advantageous. As for me, I choose to invest in blued steel, brass and copper jacketed lead.
Me

Sent from my somewhat brighter, larger, electronic leash.

On Mar 16, 2013, at 12:52, Bernie <barcand@...> wrote:

> Thanks, Garey,
> I thought I'd mount the rotary switches in an aluminum project box, using RCA jacks in and out for both keying and ALC...and sheilded wire of course. Should be a fun project. Otherwise I could probably re-dedicate part of my patch panel for that purpose also. Thanks again.
>
> Berie in ND
> WD0GMD
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, March 16, 2013 2:41 PM
> Subject: Re: [DrakeRadio] L-4 amplifier add standby
>
>
>
> Bernie -
>
> Yeah, probably, but no big deal. We have a very adult group of people here!
>

> As for your question, I don't see any problem doing that. Probably should use shielded wire,
> especially for the ALC to avoid RF pickup.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Bernie wrote:
>> Hey Mike....I LOVE the Amp-Keyer that I bought from you. I no longer have
>> to lay awake nights wondering if I'm destroying the small keying relay in
>> whatever rig I'm using to feed the amp. Been thinking of running the radio
>> keying inputs (3 or 4) through a three or four position switch to select
>> which rig is keying the amp instead of having to plug & unplug connectors.
>> Also looking at doing likewise with the ALC line back to the respective
>> rigs...for those that have an ALC feedback capability. For those rigs that
>> don't, I just make sure I don't over-drive the amp with them. Do you see
>> any difficulty in doing this? Please advise.
>> Bernie in ND
>> (Moderator - should I have changed the subject line on this query?)
>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12653. Re: TR7 probs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-16 22:03:09 UTC
From: DANIEL
Topic: 12292 Message: 12653

Hello Garey:

Thanks a lot for data ; seems to be ok only in 21mhz.

Kind regards

Daniel

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Daniel -
>
> The attached may help. With the 'Jumper' board, (part of the extender board kit,) or the same pins
> along the left-hand side of the DR-7 board.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> DANIEL wrote:
> > Hello group:
> >
> > I´m working in restoring a tr7. The pcb power supply is not working but I replaced with +24 and -5 vcc external power supply.
> >
> > The display show me 51 (fixed) and the four digits (eg 110 .0) with decimal point.
> >
> > I can change the frequency using vfo and receive some signal (internal xtal calibrator) but the up and down buttom dont work and the bands seems to be out of frequency (3mhz. down).
> >
> > I cleaned all related connectors with dr7.
> >
> > I checked the input bcd signals to digital control board from the band switch and is ok.
> >
> > The output from control pcb to dr7 dont match with the correct data to change band (N number) so I suspect in a bad function in this pcb.
> >
> > I would appreciate any help.
> >
> > LU5EMM

> >
> > Daniel
> >
> > Mar del Plata
> >
> > Bs.As. ARGENTINA
> >
> >
>
>
>
> [Non-text portions of this message have been removed]
>

12654. TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 15:04:17 UTC
From: slowcountry1
Topic: 12654 Message: 12654

All, sorry for the plethora of posts; I mistakenly thought I had all of the bugs worked out of my system but I was proven wrong.

Last evening the rig's receive and transmit decided not to track with one another. The VFO, once the unit was at stable temperature, very seldom if ever drifts. Now the transmit and receive are jumping around; when they jump or drift, they do not jump together. I did the PTO grounding this morning; this did not have any effect.

I have a small computer fan mounted on the back of the rig to push air into the PA and I have a larger fan on top of the PA sucking the air out. This is how I had it set up when I used to run it on a regular basis; frequency drift was very very minimal with this setup.

The setup is as follows; TR-4Cw, RV-4C and L-4. This issue occurs with the RV-4C controlling receive or turned off. This does not change the drift and separation of transmit and receive. I have the pieces of equipment on my desk side by each with about 2" of separation between them.

Any thoughts on where to start looking?

Doug Coffman
N9XTF

12655. Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 15:07:29 UTC
From: slowcountry1
Topic: 12624 Message: 12655

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doug -
> >
> > Those readings look a lot more reasonable. The times I have seen 'variable' neutralization, it's
> > been with mixed PA tubebrands. Since that doesn't seem to be the case here... To be honest, I
> > don't think I've ever done that thorough a job of checking neutralization! If it was just 10M,
> > I'dguess that you weren't _exactly_ on the spot. But beingoff on 80M doesn't fit that scenario.
> >
> > If you are in an experimenting mood, you might try an alternate method of neutralization. One other
> > way is to remove Screen voltage from the PA stage, then key while monitoring with a receiver and
> > adjust the neutralization capacitor, then recheck on additional bands.
> >
> > From a practical standpoint, I doubt if your current situation would cause trouble, just dip the
> > Plate current last when tuning up.
> >
> > Let us know what you find!!
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > slowcountry1 wrote:
> > > Garey brought up Neutralization on one of my earlier posts when I mentioned that I had 200 watts output on 10M. Today, I went through the neutralization process. I neutralized the PA at 29.0MHz as the manual states and was able to quickly adjust the C-76 capacitor for a dip in plate current coinciding with maximum output. 40 meters, 20 meters, 15 meters all dip at maximum output; 80 meters and 28.400 MHz, maximum output occurs above the dip in plate current.
> > >
> > > The following output power and plate current readings were found after

neutralization;
> > >
> > > 3.850 500ma plate current 210 watts output. Plate current dip at 480-490ma.
> > >
> > > 7.225 500ma plate current 210 watts output. Plate current dip and max power equal.
> > >
> > > 14.225 500ma plate current 205 watts output. Plat current dip and max power equal.
> > >
> > > 21.300 475ma plate current 200 watts output. Plate current dip and max power equal.
> > >
> > > 28.400 500ma plate current 160 watts output. Plate current dip around 450ma = 140 watts output.
> > >
> > > 29.000 450ma plate current 145 watts output. Plate current dip and max power equal
> > >
> > > The rig has 3 Sylvania 6JB6 tubes installed. I am using an MFJ oil filled 50ohm resistive dummy load. Rig was left turned on for 2 hours prior to neutralization. C-76 is meshed just a tad over half way.
> > >
> > > I really don't understand obtaining a neutralization at 29MHz but having it off on 28.400. Is the sweet spot narrow enough here that I just missed it? Is the neutralization close enough to be satisfactory or should I attempt to get 28.4 and 29.0 in the same area?
> > >
> > > Thanks,
> > >
> > > Doug Coffman
> > > N9XTF
> > >
> >
>
> Garey,
>
> At some point, in the near future, I will go through it again and see if I can find a sweet spot. As long as it does not cause an issue I will use it as is, for now.
>
> I opened up the covers on the L4 and L4-PS this morning just to make sure everything was in order. I replaced the air box seal as it was vaporized. The power switch / CW/SSB switch was replaced by the previous owner; I found that the wires were soldered but just not to the switch. They were through the contact holes and soldered they just didn't heat the tabs to flow the solder. I corrected that and fired the old girl up. I was pleasantly surprised that it tuned right up without tube flashes or component arcing. The tubes are date code 1968 3-400's.
>
> The power supply transformer settings are for 230VAC however; my line voltage is a consistent 245VAC. The CW voltage shows 2100 volts and the SSB voltage shows a tad shy of 3000 volts. Tuned up as prescribed, in SSB operation, a whistle or voice peaks on my peak reading meter indicate almost 1300 watts output. This is great for an old set of tubes and I'm sure that's about 200 to 300 watts more that it was designed for. The increased line voltage is behind the increased output.
>
> I went back through some old information that Steve Katz, WB2WIK, sent me back in 2004

regarding questions I had on this amplifier. I need to verify that the increased line voltage hasn't increased the filament voltage out of its safe range and I need to verify the high voltage readings. Other than that, all seems good.
>
> All in all, everything is working great for the time being. Your CD's and helpful information has been indispensable returning my gear back to service. Thanks again,
>
> Doug Coffman
> N9XTF
>

Garey,

I have found that after loading for maximum output, If I re-peak the tune control for maximum plate amps, and then re-dip the grid, maximum power output occurs at the dip on 28.400MHz.

Do you see any problem with this extra step? Will this cause distortion issues>

Thanks,

Doug Coffman
N9XTF

12656. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 15:36:19 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 12656

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

12657. Re: [DrakeRadio] TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 16:35:52 UTC
From: Garey Barrell
Topic: 12654 Message: 12657

Doug -

First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
and cooling with transmit and receive conditions. Get the hot air OUT and AWAY from the radio.

Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
frequency than the TR-4Cw.

I would say....

1. Measure the regulated +150 in transmit and receive, ensure that it stays 'lit' and the voltage
stays still!

2. Measure the voltage at each of the PTO's to ensure that voltagestays constant.

3. DeoxIT the slide switch on the left side.

4. Replace U1, MC14016BCP. Any of the CMOS *4016* ICs will do.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> All, sorry for the plethora of posts; I mistakenly thought I had all of the bugs worked out of my system but I was proven wrong.
>
> Last evening the rig's receive and transmit decided not to track with one another. The VFO, once the unit was at stable temperature, very seldom if ever drifts. Now the transmit and receive are jumping around; when they jump or drift, they do not jump together. I did the PTO grounding this morning; this did not have any effect.
>
> I have a small computer fan mounted on the back of the rig to push air into the PA and I have a larger fan on top of the PA sucking the air out. This is how I had it set up when I used to run it on a regular basis; frequency drift was very very minimal with this setup.
>
> The setup is as follows; TR-4Cw, RV-4C and L-4. This issue occurs with the RV-4C controlling receive or turned off. This does not change the drift and separation of

transmit and receive. I have the pieces of equipment on my desk side by each with about 2" of separation between them.
>
> Any thoughts on where to start looking?
>
> Doug Coffman
> N9XTF
>
>
>

12658. Re: [DrakeRadio] Re: TR-4Cw PA Neutralization

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 16:37:38 UTC
From: Garey Barrell
Topic: 12624 Message: 12658

> Garey,
>
> I have found that after loading for maximum output, If I re-peak the tune control for maximum plate amps, and then re-dip the grid, maximum power output occurs at the dip on 28.400MHz.
>
> Do you see any problem with this extra step? Will this cause distortion issues>
>
> Thanks,
>
> Doug Coffman
> N9XTF
>

No problem.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12659. Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 17:40:06 UTC
From: slowcountry1
Topic: 12654 Message: 12659

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
> and cooling with transmit and receive conditions. Get the hot air OUT and AWAY from the radio.
>
> Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
> transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
> frequency than the TR-4Cw.
>
> I would say....
>
> 1. Measure the regulated +150 in transmit and receive, ensure that it stays 'lit' and the voltage
> stays still!
>
> 2. Measure the voltage at each of the PTO's to ensure that voltagestays constant.
>
> 3. DeoxIT the slide switch on the left side.
>
> 4. Replace U1, MC14016BCP. Any of the CMOS *4016* ICs will do.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > All, sorry for the plethora of posts; I mistakenly thought I had all of the bugs worked out of my system but I was proven wrong.
> >
> > Last evening the rig's receive and transmit decided not to track with one another. The VFO, once the unit was at stable temperature, very seldom if ever drifts. Now the transmit and receive are jumping around; when they jump or drift, they do not jump together. I did the PTO grounding this morning; this did not have any effect.
> >
> > I have a small computer fan mounted on the back of the rig to push air into the PA and I have a larger fan on top of the PA sucking the air out. This is how I had it set up when

I used to run it on a regular basis; frequency drift was very very minimal with this setup.
> >
> > The setup is as follows; TR-4Cw, RV-4C and L-4. This issue occurs with the RV-4C controlling receive or turned off. This does not change the drift and separation of transmit and receive. I have the pieces of equipment on my desk side by each with about 2" of separation between them.
> >
> > Any thoughts on where to start looking?
> >
> > Doug Coffman
> > N9XTF
> >
> >
> >
>
Garey,

I will definatly check those points. To clarify, if the rig is controlling both transmit and receive, remote VFO off, this condition occurs. If I use the remote VFO to control both the same problem exists. Transmit and receive drift but not together. Transmit frequency may change while receive frequency stays stable and sometimes it works the other way.

I had not grounded the the PTO on the RV-4C until just a few minutes ago. I will remove the fan blowing into the PA cage.

Thanks again,

Doug

12660. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 17:56:20 UTC
From: Garey Barrell
Topic: 12654 Message: 12660

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
>> and cooling with transmit and receive conditions. Get the hot air OUT and AWAY from the radio.
>>
>> Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
>> transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
>> frequency than the TR-4Cw.
>>
>> I would say....
>>
>> 1. Measure the regulated +150 in transmit and receive, ensure that it stays 'lit' and the voltage
>> stays still!
>>
>> 2. Measure the voltage at each of the PTO's to ensure that voltagestays constant.
>>
>> 3. DeoxIT the slide switch on the left side.
>>
>> 4. Replace U1, MC14016BCP. Any of the CMOS *4016* ICs will do.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> All, sorry for the plethora of posts; I mistakenly thought I had all of the bugs worked out of my system but I was proven wrong.
>>>
>>> Last evening the rig's receive and transmit decided not to track with one another. The VFO, once the unit was at stable temperature, very seldom if ever drifts. Now the transmit and receive are jumping around; when they jump or drift, they do not jump together. I did the PTO grounding this morning; this did not have any effect.
>>>

>>> I have a small computer fan mounted on the back of the rig to push air into the PA and I have a larger fan on top of the PA sucking the air out. This is how I had it set up when I used to run it on a regular basis; frequency drift was very very minimal with this setup.
>>>
>>> The setup is as follows; TR-4Cw, RV-4C and L-4. This issue occurs with the RV-4C controlling receive or turned off. This does not change the drift and separation of transmit and receive. I have the pieces of equipment on my desk side by each with about 2" of separation between them.
>>>
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>>>
>>> Doug Coffman
>>> N9XTF
>>>
>>>
>>>
> Garey,
>
> I will definatly check those points. To clarify, if the rig is controlling both transmit and receive, remote VFO off, this condition occurs. If I use the remote VFO to control both the same problem exists. Transmit and receive drift but not together. Transmit frequency may change while receive frequency stays stable and sometimes it works the other way.
>
> I had not grounded the the PTO on the RV-4C until just a few minutes ago. I will remove the fan blowing into the PA cage.
>
> Thanks again,
>
> Doug
>
Doug -

OK. The fact that it's the same with either one eliminates the PTOs as a source. The other two
oscillators that determine frequency on transmit and receiveare both crystal controlled, and should
NOT move. Does the frequency 'drift' or does it 'jump'.?

I'm leaning more and more to the MC14016 IC. You can disconnect the RIT line from the side of the
PTO, just behind the gearbox. The dial calibration will be off a bit, but see if that 'fixes' the
instability.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12661. Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 18:01:17 UTC
From: slowcountry1
Topic: 12654 Message: 12661

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
> >> and cooling with transmit and receive conditions. Get the hot air OUT and AWAY from the radio.
> >>
> >> Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
> >> transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
> >> frequency than the TR-4Cw.
> >>
> >> I would say....
> >>
> >> 1. Measure the regulated +150 in transmit and receive, ensure that it stays 'lit' and the voltage
> >> stays still!
> >>
> >> 2. Measure the voltage at each of the PTO's to ensure that voltagestays constant.
> >>
> >> 3. DeoxIT the slide switch on the left side.
> >>
> >> 4. Replace U1, MC14016BCP. Any of the CMOS *4016* ICs will do.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>
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> >>>
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> >>>
> >>> Any thoughts on where to start looking?
> >>>
> >>> Doug Coffman
> >>> N9XTF
> >>>
> >>>
> >>>
> > Garey,
> >
> > I will definatly check those points. To clarify, if the rig is controlling both transmit and receive, remote VFO off, this condition occurs. If I use the remote VFO to control both the same problem exists. Transmit and receive drift but not together. Transmit frequency may change while receive frequency stays stable and sometimes it works the other way.
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> > I had not grounded the the PTO on the RV-4C until just a few minutes ago. I will remove the fan blowing into the PA cage.
> >
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> >
> Doug -
>
> OK. The fact that it's the same with either one eliminates the PTOs as a source. The other two
> oscillators that determine frequency on transmit and receiveare both crystal controlled, and should
> NOT move. Does the frequency 'drift' or does it 'jump'.?
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> I'm leaning more and more to the MC14016 IC. You can disconnect the RIT line from the side of the
> PTO, just behind the gearbox. The dial calibration will be off a bit, but see if that 'fixes' the
> instability.
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
Garey,

The frequency jumps pretty quickly. RIT line? Is this present on the TR-4Cw? Mine does not have rit.

12662. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 19:00:54 UTC
From: Richard Knoppow
Topic: 12654 Message: 12662

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, March 17, 2013 10:40 AM
Subject: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

>
> I had not grounded the the PTO on the RV-4C until just a
> few minutes ago. I will remove the fan blowing into the PA
> cage.
>
> Thanks again,
>
> Doug
>
To clarify: the fan is needed, just _reverse_ it so that it blows outward, that is so sucks the hot air from around the finals. It will also cause cool air to flow in around the chassis. While most of the heat is from the final tubes there is some from elsewhere and reversing the fan will help cool everything.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12663. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-17 19:07:39 UTC
From: Garey Barrell
Topic: 12654 Message: 12663

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> slowcountry1 wrote:
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
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>>>> Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
>>>> transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
>>>> frequency than the TR-4Cw.
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>>>> stays still!
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>>>> slowcountry1 wrote:
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>>>>>
>>>>> Any thoughts on where to start looking?
>>>>>
>>>>> Doug Coffman
>>>>> N9XTF
>>>>>
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>>>>>
>>> Garey,
>>>
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>>>
>>> I had not grounded the the PTO on the RV-4C until just a few minutes ago. I will remove the fan blowing into the PA cage.
>>>
>>> Thanks again,
>>>
>>> Doug
>>>
>> Doug -
>>
>> OK. The fact that it's the same with either one eliminates the PTOs as a source. The other two
>> oscillators that determine frequency on transmit and receiveare both crystal controlled, and should
>> NOT move. Does the frequency 'drift' or does it 'jump'.?
>>
>> I'm leaning more and more to the MC14016 IC. You can disconnect the RIT line from the side of the
>> PTO, just behind the gearbox. The dial calibration will be off a bit, but see if that 'fixes' the
>> instability.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>

>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
> Garey,
>
> The frequency jumps pretty quickly. RIT line? Is this present on the TR-4Cw? Mine does not have rit.
>
>
>
>
Doug -

Sorry..... Wrong radio! :-)

Does it do this on 80/20, other bands, or both?

Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.

Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
soaked with DeoxIT, through N.O. and N.C. contacts.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12664. Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 16:04:19 UTC
From: Terrell Hamilton
Topic: 12664 Message: 12664

Hi, all - my ESET security program just quarantined the recent email on the DrakeRadio website. The poster has sent emails at least once before, and I seem to remember that some problem was connected with my last reception of his mailing.

I'm not sure if this means anything dangerous to us, but thought I'd pass it on.

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

12665. Re: [DrakeRadio] Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 16:16:54 UTC
From: Joe
Topic: 12664 Message: 12665

Probably was a trigger word your security program didn't like. I just 'took' his post apart and there are no hidden nasties in it.

Security programs can be funny...For instance, a few years ago, many households were very upset because their security programs wouldn't let a Disney site and messages come through, due to a 'trigger' word in the content...(Forget now what it was, but Disney changed the content so as to not get thrown into a quarantine directory!)

Thanks for the head's up though...one can never be too cautious!

Joe - Wolfe - WA6RKN
Moderator

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
Subject: [DrakeRadio] Trojan Horse found on myteaquinn emails

>
>
> Hi, all - my ESET security program just quarantined the recent email on
> the
> DrakeRadio website. The poster has sent emails at least once before, and
> I
> seem to remember that some problem was connected with my last reception of
> his mailing.
>
>
>
> I'm not sure if this means anything dangerous to us, but thought I'd pass
> it
> on.

12666. Re: [DrakeRadio] Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 16:23:03 UTC
From: Jim Shorney
Topic: 12664 Message: 12666

FWIW, I saw a note from the same poster in a Nikon group that I read which had received the same spam at the same time. He apologized and indicated that he was aware of the problem and had taken measures.

73

-Jim
NU0C

On Mon, 18 Mar 2013 09:04:19 -0700, Terrell Hamilton wrote:

>
>
>Hi, all - my ESET security program just quarantined the recent email on the
>DrakeRadio website. The poster has sent emails at least once before, and I
>seem to remember that some problem was connected with my last reception of
>his mailing.
>
>
>
>I'm not sure if this means anything dangerous to us, but thought I'd pass it
>on.
>
>
>
>Terry K7WLD
>
>Wenatchee, WA
>
>
>
>Terry and The Pirates
>
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>
>
>[Non-text portions of this message have been removed]

>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12667. Re: [DrakeRadio] Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 16:27:41 UTC
From: Don Cunningham
Topic: 12664 Message: 12667

My ISP is also deleting all his posts, Terry. I have seen replies to him, but not his originals.

I had a similar problem with Mouser Electronics years ago. Some strange word in their emails triggered it, and it took us weeks to find that one, so I don't ask him to look unless I really need the posts.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2904 / Virus Database: 2641/6184 - Release Date: 03/17/13

[Non-text portions of this message have been removed]

12668. Re: [DrakeRadio] Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 16:46:26 UTC
From: Jim Shorney
Topic: 12664 Message: 12668

There was at least one recent spam email from that account posted across multiple groups, containing a malicious URL of the type that we have been seeing a lot of lately. That's probably what got him flagged. As I mentioned, he posted in a another group that he was aware and taking measures.

73

-Jim
NU0C

On Mon, 18 Mar 2013 11:27:41 -0500, Don Cunningham wrote:

>My ISP is also deleting all his posts, Terry. I have seen replies to him, but not his originals.

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12669. Re: [DrakeRadio] Trojan Horse found on myteaquinn emails

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 17:16:30 UTC
From: Garey Barrell
Topic: 12664 Message: 12669

He has been 'moderated' since the weird URL posted.

Unlax.....!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> There was at least one recent spam email from that account posted across
> multiple groups, containing a malicious URL of the type that we have been
> seeing a lot of lately. That's probably what got him flagged. As I mentioned,
> he posted in a another group that he was aware and taking measures.
>
> 73
>
> -Jim
> NU0C
>
>

12670. R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 20:24:19 UTC
From: Al
Topic: 12670 Message: 12670

I recently picked up and re-aligned an R-4A, and I have a question about the accuracy of the S-meter. If I adjust the sensitivity control and bias for an indication of S-9 with about 100 microvolts at the antenna, and then go up 10 dB on my signal generator, it just goes up to a little more than the +5 mark, and then if I increase the signal level another 10 dB, it goes up to about the +10 indication (should be +20 over 9 at this point), and so on up to about +30 dB on the meter. Then it starts increasing more rapidly with increased signal level, so that with a 60 dB signal increase from the S-9 point, it does read close to +60 on the meter. It's just in between (about +10 to about +40) it doesn't seem to read very accurately.
I was just wondering if this is normal for these radios. I tried all different setting of the S-meter sensitivity and bias pots, but they don't make a huge difference.

If I listen to strong signals on the air, most of them read between S-7 and 20 over. Almost never do any signals read much above +20 over 9.

I suppose my signal generator could have some leakage at some signal levels. (I'm using a Wavetek 3001, which has been calibrated a couple
years ago or so.)

Any thoughts would be appreciated.

Al, WA2S

12671. Re: [DrakeRadio] R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 20:43:47 UTC
From: Garey Barrell
Topic: 12670 Message: 12671

Al -

I've never paid too much attention to S-meters since there is no real standard, and they are
completely dependent on the AVC characteristics of the receiver.

I have looked at ONE R-4B out of curiosity one day, and was surprised how close it was, at least at
S9 +/- 30 dB. First S9 is 50 uV, not 100 uV. There's confusion about this because Collins calibrates their S-Meters for 50 uV at S9, but they specify 100 uV from the generator, AND a 50 ohm
termination at the receiver end of the cable. So the 100 uV is 'split' between the 50 ohm resistor
and the receiver input, which is _nominally_ 50 ohms. This is probably more consistent because it
properly terminates the coax but causes confusion.

S-Units are specified as 5 dB by Drake, 6 dB by some others. Anyway, the newly aligned R-4B in
question showed S9 at 50 uV, and was 'accurate' when increased 30 dB or decreasedto S3. Obviously
the meter scale and pointer don't contribute much to accuracy, but ...

Remember the first mark is S1, not S0.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Al wrote:
> I recently picked up and re-aligned an R-4A, and I have a question about the accuracy of the S-meter. If I adjust the sensitivity control and bias for an indication of S-9 with about 100 microvolts at the antenna, and then go up 10 dB on my signal generator, it just goes up to a little more than the +5 mark, and then if I increase the signal level another 10 dB, it goes up to about the +10 indication (should be +20 over 9 at this point), and so on up to about +30 dB on the meter. Then it starts increasing more rapidly with increased signal level, so that with a 60 dB signal increase from the S-9 point, it does read close to +60 on the meter. It's just in between (about +10 to about +40) it doesn't seem to read very accurately.
> I was just wondering if this is normal for these radios. I tried all different setting of the S-meter sensitivity and bias pots, but they don't make a huge difference.
>
> If I listen to strong signals on the air, most of them read between S-7 and 20 over. Almost never do any signals read much above +20 over 9.

>
> I suppose my signal generator could have some leakage at some signal levels. (I'm using a Wavetek 3001, which has been calibrated a couple
> years ago or so.)
>
> Any thoughts would be appreciated.
>
> Al, WA2S
>
>
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
>

12672. Re: [DrakeRadio] R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 20:54:29 UTC
From: Richard Knoppow
Topic: 12670 Message: 12672

```
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 18, 2013 1:43 PM
Subject: Re: [DrakeRadio] R-4A S-meter linearity

> Al -
>
> I've never paid too much attention to S-meters since there
> is no real standard, and they are
> completely dependent on the AVC characteristics of the
> receiver.
>
> I have looked at ONE R-4B out of curiosity one day, and
> was surprised how close it was, at least at
> S9 +/- 30 dB. First S9 is 50 uV, not 100 uV. There's
> confusion about this because Collins
> calibrates their S-Meters for 50 uV at S9, but they
> specify 100 uV from the generator, AND a 50 ohm
> termination at the receiver end of the cable. So the 100
> uV is 'split' between the 50 ohm resistor
> and the receiver input, which is _nominally_ 50 ohms.
> This is probably more consistent because it
> properly terminates the coax but causes confusion.
>
> S-Units are specified as 5 dB by Drake, 6 dB by some
> others. Anyway, the newly aligned R-4B in
> question showed S9 at 50 uV, and was 'accurate' when
> increased 30 dB or decreasedto S3. Obviously
> the meter scale and pointer don't contribute much to
> accuracy, but ...
>
> Remember the first mark is S1, not S0.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Al wrote:
>> I recently picked up and re-aligned an R-4A, and I have a
>> question about the accuracy of the S-meter. If I adjust
>> the sensitivity control and bias for an indication of S-9
```

>> with about 100 microvolts at the antenna, and then go up
>> 10 dB on my signal generator, it just goes up to a little
>> more than the +5 mark, and then if I increase the signal
>> level another 10 dB, it goes up to about the +10
>> indication (should be +20 over 9 at this point), and so
>> on up to about +30 dB on the meter. Then it starts
>> increasing more rapidly with increased signal level, so
>> that with a 60 dB signal increase from the S-9 point, it
>> does read close to +60 on the meter. It's just in between
>> (about +10 to about +40) it doesn't seem to read very
>> accurately.
>> I was just wondering if this is normal for these radios.
>> I tried all different setting of the S-meter sensitivity
>> and bias pots, but they don't make a huge difference.
>>
>> If I listen to strong signals on the air, most of them
>> read between S-7 and 20 over. Almost never do any signals
>> read much above +20 over 9.
>>
>> I suppose my signal generator could have some leakage at
>> some signal levels. (I'm using a Wavetek 3001, which has
>> been calibrated a couple
>> years ago or so.)
>>
>> Any thoughts would be appreciated.
>>
>> Al, WA2S
>>
I think the book for the R4B states that S-9 is _about_
30 uV. I checked mine with a calibrated signal generator, I
think on 40 meters, and found it very close. I don't
remember what I found on other levels. As Garrey says there
is no real standard, manufacturers have used values from
about 25 uV to 100 uV and many receivers have an adjustment
so you can make the meter read whatever you want. The
calibration of the meter will depend on the AVC which will
be all over the place depending on tube gain, etc. Mainly
an S-Meter is to give rough comparisons of signal strength
and to aid tuning. It is typical for AVC systems to
compress a bit at higher levels so often meters will read
fairly accurately up to perhaps S-9 +10db and increasingly
compressed above that. It also depends on what exactly the
meter is reading. Some read AVC voltage, some carrier level
at the detector, some cathode current of one or more tubes,
all subject to different variations. However, if an S-meter
is very far off in its indications it can mean that
something has gone wrong but that will usually show up in
some other, more definite way.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12673. Re: [DrakeRadio] R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 21:18:47 UTC
From: Garey Barrell
Topic: 12670 Message: 12673

> Richard Knoppow wrote:
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, March 18, 2013 1:43 PM
> Subject: Re: [DrakeRadio] R-4A S-meter linearity
>
>
>> Al -
>>
>> I've never paid too much attention to S-meters since there
>> is no real standard, and they are
>> completely dependent on the AVC characteristics of the
>> receiver.
>>
>> I have looked at ONE R-4B out of curiosity one day, and
>> was surprised how close it was, at least at
>> S9 +/- 30 dB. First S9 is 50 uV, not 100 uV. There's
>> confusion about this because Collins
>> calibrates their S-Meters for 50 uV at S9, but they
>> specify 100 uV from the generator, AND a 50 ohm
>> termination at the receiver end of the cable. So the 100
>> uV is 'split' between the 50 ohm resistor
>> and the receiver input, which is _nominally_ 50 ohms.
>> This is probably more consistent because it
>> properly terminates the coax but causes confusion.
>>
>> S-Units are specified as 5 dB by Drake, 6 dB by some
>> others. Anyway, the newly aligned R-4B in
>> question showed S9 at 50 uV, and was 'accurate' when
>> increased 30 dB or decreasedto S3. Obviously
>> the meter scale and pointer don't contribute much to
>> accuracy, but ...
>>
>> Remember the first mark is S1, not S0.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Al wrote:
>>> I recently picked up and re-aligned an R-4A, and I have a

>>> question about the accuracy of the S-meter. If I adjust
>>> the sensitivity control and bias for an indication of S-9
>>> with about 100 microvolts at the antenna, and then go up
>>> 10 dB on my signal generator, it just goes up to a little
>>> more than the +5 mark, and then if I increase the signal
>>> level another 10 dB, it goes up to about the +10
>>> indication (should be +20 over 9 at this point), and so
>>> on up to about +30 dB on the meter. Then it starts
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>>> that with a 60 dB signal increase from the S-9 point, it
>>> does read close to +60 on the meter. It's just in between
>>> (about +10 to about +40) it doesn't seem to read very
>>> accurately.
>>> I was just wondering if this is normal for these radios.
>>> I tried all different setting of the S-meter sensitivity
>>> and bias pots, but they don't make a huge difference.
>>>
>>> If I listen to strong signals on the air, most of them
>>> read between S-7 and 20 over. Almost never do any signals
>>> read much above +20 over 9.
>>>
>>> I suppose my signal generator could have some leakage at
>>> some signal levels. (I'm using a Wavetek 3001, which has
>>> been calibrated a couple
>>> years ago or so.)
>>>
>>> Any thoughts would be appreciated.
>>>
>>> Al, WA2S
>>>
> I think the book for the R4B states that S-9 is _about_
> 30 uV. I checked mine with a calibrated signal generator, I
> think on 40 meters, and found it very close. I don't
> remember what I found on other levels. As Garrey says there
> is no real standard, manufacturers have used values from
> about 25 uV to 100 uV and many receivers have an adjustment
> so you can make the meter read whatever you want. The
> calibration of the meter will depend on the AVC which will
> be all over the place depending on tube gain, etc. Mainly
> an S-Meter is to give rough comparisons of signal strength
> and to aid tuning. It is typical for AVC systems to
> compress a bit at higher levels so often meters will read
> fairly accurately up to perhaps S-9 +10db and increasingly
> compressed above that. It also depends on what exactly the
> meter is reading. Some read AVC voltage, some carrier level
> at the detector, some cathode current of one or more tubes,
> all subject to different variations. However, if an S-meter
> is very far off in its indications it can mean that
> something has gone wrong but that will usually show up in
> some other, more definite way.

>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
Richard -

Yeah, I've been setting mine for S9 = 50 uV for so long I'd forgotten. So I'm about one S unit high.

It's more in line with Collins, Kenwood, and I think most others. Again, ALL relative. Now if you
have an Empire NF-105 with calibrated antennas ... :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com

12674. Re: [DrakeRadio] R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 22:36:59 UTC
From: Richard Knoppow
Topic: 12670 Message: 12674

>>
> Richard -
>
> Yeah, I've been setting mine for S9 = 50 uV for so long
> I'd forgotten. So I'm about one S unit high.
>
> It's more in line with Collins, Kenwood, and I think most
> others. Again, ALL relative. Now if you
> have an Empire NF-105 with calibrated antennas ... :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com

My Collins R-388 has arbitrary calibrations in db above
the AVC threshold. That is about 2.5 micro-volts on this
particular receiver. The calibrations are actually not far
off. Of course, I never hear any contesters reporting
anything except 599. BTW how can you have 599 for phone?

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12675. RE: [DrakeRadio] R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-18 22:44:18 UTC
From: Terrell Hamilton
Topic: 12670 Message: 12675

Richard,

About the 599 thingee, I've had LOTS of people tell me they
"didn't like my tone..."

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
Behalf Of Richard Knoppow
Sent: Monday, March 18, 2013 3:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4A S-meter linearity

>>
> Richard -
>
> Yeah, I've been setting mine for S9 = 50 uV for so long
> I'd forgotten. So I'm about one S unit high.
>
> It's more in line with Collins, Kenwood, and I think most
> others. Again, ALL relative. Now if you
> have an Empire NF-105 with calibrated antennas ... :-)
>
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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My Collins R-388 has arbitrary calibrations in db above
the AVC threshold. That is about 2.5 micro-volts on this
particular receiver. The calibrations are actually not far
off. Of course, I never hear any contesters reporting
anything except 599. BTW how can you have 599 for phone?

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

12676. Re: [DrakeRadio] Bringing my TR-4 back to life... usable but not completely fixed - LONG

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 00:08:13 UTC
From: Mark Pilant
Topic: 11909 Message: 12676

OK. I finally managed to get on our local 10m net last night and give the TR-4 a try. I got good signal reports, so I'm almost there. I'll declare it working, but I'll note the remaining problems in another message.

Where I started...

I picked up the TR-4 on this list. It was described as:

"Bought at a flea and I didn't look close enough. Appears something was spilt on top and not cleaned up inside.
Cabinet shell looks good except for a deep scratch and dent on front edge; bottom of shell is free of dents bit some scuffs, that appears to be retouched by someone.
The front panel is clean, knobs look good, tuning knob needs inlay.
Meters and pilot lights all ok.
Copper corrosion.
Every control sounds dirty.
A quick test found no receiver, cannot copy it's own 100 Kc calibrator.and because of contamination transmitter not checked.
I didn't want to do any more damage."

I put the pictures of the rig here:

http://www.n1vqw.net/tr4rebuild/

After cleaning it all up, I applied power (using the AC-4 I recently rebuilt) to see what was up. I figured since power had already been applied I wasn't likely to do too much more damage.

As the seller indicated... nothing.

The first thing I did was give it a fairly serious cleaning using cotton swabs and distilled water. Even then, I had to be careful of the tube markings and some on the Drake inking on the PTO and chassis.

The first problems I found were:
o The T/R switch was broken. So I drilled out the rivets and replace the switch I got locally. I used pan head screws to minimize the interference with the covers. In replacing the switch I discovered the RFC (750 uHy, 500 mA) was bad. I have not yet replaced it, but it is on the list.
o The original K1 relay had had a hacked in replacement. I ripped it out and replaced it with the available relay board and a new relay from Mouser.
o The #12 lamp and socket were also long gone.

After all of this, I was starting to see signs of life when I applied
a 7.200 MHz signal to the antenna jack (from my HP 8640B). I was
seeing deflection of the S-meter with the signal applied.

I was also getting AC hum in the speaker.

Garey suggested a number of things:
o Check all the DC voltages; in particular the -60V bus.
o Make sure the S-Meter was zeroed.

All of the voltages were OK. All of the tubes tested OK on my TV-7/B.
And I completely forgot about the zero pot. Sheepish grin :-)

Garey then suggested:
o Double checking the T/R switch on the side was in the TCVR
position.
o Check the Cathode, Screen, and Plate of the audio output
tube (6AQ5) and other tubes "feeding it".
o Verify all the tube plates have voltage.

The T/R switch was in the correct position, and the plate voltages
were OK, but some of the other voltages on the 6AQ5 were very strange.

At this point I decided to do a complete voltage check; and Garey
agreed it would be a good idea.

In the process of doing the voltage check, I discovered a number of
other "modifications":
o The socket for V5, the calibration oscillator, had *real*
loose pins. I replaced it with one of the same kind from
my junk box.
o There was a relay on the chassis shield by V5 which was only
partly wired up. This was removed.
o There was a loose wire (white/gray stripe) in the vicinity
of the MIC jack which was "flying in the breeze". This
turned out to be the PTT line.
o The original MIC jack had been replaced with a 1/4" jack.
o There was a cut wire near the power plug on the back of the
chassis. (It was the VOX relay line.) Fortunately, the
remainder of the wire was on the power plug and with my
handy "wire stretcher" I was able to hook it back up.

After fixing all of these problems, I was able to do a complete
voltage check. While most of the voltages were within 10% of what
they were supposed to be, other were *way* out.

So, now for the single thing which helped the most...

Since I had cleaned the chassis, and the switch contacts (with Deoxit)
I get to thinking the tube sockets and tube pins might also benefit.
BOY!!! was I right.

After a thorough cleaning, I was going to do a voltage check, but
instead just fired it up. It happened to be on 40m, and I started

to hear signals. (The rig was connected to my R-7 antenna.) Not only could I hear signals, but the hum was gone, and the volume control actually worked. (It didn't originally work.)

After all of this, I did a thorough alignment and was impressed with how close things really were. Some adjustments were a little "touchy" but all-in-all, not too bad.

I've spent the past couple of weeks just cruising the various bands, and bringing and RV-4C back to life as well. Since I was able to get on the air this past Sunday I figured it was time to wrap things up with a description of what I did.

A big thank you to all the folks on the list, and to Garey's CDs. The high resolution pictured really helped.

73

- Mark N1VQW

12677. Re: [DrakeRadio] Bringing my TR-4 back to life... final problem list

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 00:22:18 UTC
From: Mark Pilant
Topic: 12677 Message: 12677

While my TR-4 is now usable, there are still some remaining minor problems to be addressed:
o Sometimes, when switching from X-CW to SSB after tuning up, the receiver is still muted. However, switching back to X-CW and then to SSB again seems to "fix" the problem.
o While listing on the 10m net Sunday, I was hearing almost a low frequency "pulse" type noise. I'd put it about 10 to 20 Hz. It was not AC hum. It is less on the lower frequency bands, but still there. It is also more pronounced the higher the audio gain.
o The S-Meter zeroing doesn't seem to "hold". When switching around the bands, the zeroing of the S-Meter will have to adjusted. BTW, I'll switch over to my dummy load before adjusting just to eliminate as many spurious signals as possible.
o There seems to be some audio "bleed-through" in my head phones when transmitting. (I'm using Kenwood HS-5 head phones.) When I transmit, I can definitely hear my audio in my ears.

All of these need to be fixed, but as I said, the rig is usable and it does transmit and receive well.

My first step is going to be to check through the archives to see if others have reported the same problems.

Now I need to rebuild my AC-3 and attend to my ailing TR-3 :-P

73

- Mark N1VQW

12678. Re: [DrakeRadio] Bringing my TR-4 back to life... final problem list

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 01:54:04 UTC
From: Garey Barrell
Topic: 12677 Message: 12678

Mark -

Nice Write-up.....

1. Usually indicates dirty relay contacton the (RCVR K) contact. Make
sure the relay wiperisn't bent and that N.O. contact isn't bent up a bit.

2. Dunno... Hearing ionosphere shift close to MUF??

3. S-Meter 'drift' is usually a gassy tube. The S-Meter compares the
current drawn by V17 with the current through V11 and V15. V15 is
most suspect since the 12BA6 is prone to this, but could also be V11.
You can measure the cathode current of V15 over time and see if it
drifts with the S-Meter.

4. Did you do the IF Neutralization adjustment (Section L of the
Alignment)? It should take care of 'almost' all of that feedback.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> While my TR-4 is now usable, there are still some remaining minor
> problems to be addressed:
> o Sometimes, when switching from X-CW to SSB after tuning
> up, the receiver is still muted. However, switching back
> to X-CW and then to SSB again seems to "fix" the problem.
> o While listing on the 10m net Sunday, I was hearing almost
> a low frequency "pulse" type noise. I'd put it about 10
> to 20 Hz. It was not AC hum. It is less on the lower
> frequency bands, but still there. It is also more
> pronounced the higher the audio gain.
> o The S-Meter zeroing doesn't seem to "hold". When switching
> around the bands, the zeroing of the S-Meter will have to
> adjusted. BTW, I'll switch over to my dummy load before
> adjusting just to eliminate as many spurious signals as
> possible.
> o There seems to be some audio "bleed-through" in my head
> phones when transmitting. (I'm using Kenwood HS-5 head
> phones.) When I transmit, I can definitely hear my audio
> in my ears.
>
> All of these need to be fixed, but as I said, the rig is usable

> and it does transmit and receive well.
>
> My first step is going to be to check through the archives to see
> if others have reported the same problems.
>
> Now I need to rebuild my AC-3 and attend to my ailing TR-3 :-P
>
> 73
>
> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

12679. TR-4Cw S-Meter question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 12:25:00 UTC
From: slowcountry1
Topic: 12679 Message: 12679

While resurrecting my TR-4Cw, one of the first things that I did was to put a dummy load directly at the antenna jack, rotate the RF gain slider fully CCW and adjust the S meter pot for 60db over 9 as indicated in the manual. With the RF gain slider full CW, with the dummy load in the same position, the S-Meter reads upscale at S4 or S5 instead of S1. With the power turned off on the rig, the S-meter will return fully to the left.

I fully understand that S-meters are subjective and I rarely concern myself with the readings; however I wanted to find out if this was an indication of a problem. I'm assuming this is not normal operation. Should I replace V-17 or what areas should I check?

Thanks,

Doug Coffman
N9XTF

12680. Re: [DrakeRadio] TR-4Cw S-Meter question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 13:40:45 UTC
From: Garey Barrell
Topic: 12679 Message: 12680

Doug -

You're unable to reach S1 with the ZERO pot on the side??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> While resurrecting my TR-4Cw, one of the first things that I did was to put a dummy load directly at the antenna jack, rotate the RF gain slider fully CCW and adjust the S meter pot for 60db over 9 as indicated in the manual. With the RF gain slider full CW, with the dummy load in the same position, the S-Meter reads upscale at S4 or S5 instead of S1. With the power turned off on the rig, the S-meter will return fully to the left.
>
> I fully understand that S-meters are subjective and I rarely concern myself with the readings; however I wanted to find out if this was an indication of a problem. I'm assuming this is not normal operation. Should I replace V-17 or what areas should I check?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
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>

12681. Re: TR-4Cw S-Meter question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 14:04:14 UTC
From: slowcountry1
Topic: 12679 Message: 12681

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> You're unable to reach S1 with the ZERO pot on the side??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > While resurrecting my TR-4Cw, one of the first things that I did was to put a dummy load directly at the antenna jack, rotate the RF gain slider fully CCW and adjust the S meter pot for 60db over 9 as indicated in the manual. With the RF gain slider full CW, with the dummy load in the same position, the S-Meter reads upscale at S4 or S5 instead of S1. With the power turned off on the rig, the S-meter will return fully to the left.
> >
> > I fully understand that S-meters are subjective and I rarely concern myself with the readings; however I wanted to find out if this was an indication of a problem. I'm assuming this is not normal operation. Should I replace V-17 or what areas should I check?
> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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> >
>
Garey,

With the dummy load attached and the RF gain fully CW, I can adjust the Zero pot on the side and set to S1. When I rotate the RF gain fully CCW, it will only reach S9+30db.

I just re-read the manual. I confused the S meter adjustment with the Zero adjustment. With the S-meter at S1 I need to adjust R187 with RF gain fully CCW to obtain S9+60

Ignore the post, I totally confused two subjects and will adjust accordingly.

Doug Coffman
N9XTF

12682. need supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 14:13:51 UTC
From: yash@aol.com
Topic: 12682 Message: 12682

Looking for a Drake ac-3 or Ac-4 supply. Does not have to be working ,as long as the supply transformer is operational. Cosmetics not important. cnn do Pay Pal + to USPS MO.Please get back off list.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12683. Re: R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 15:47:58 UTC
From: Al Schichler
Topic: 12670 Message: 12683

Thanks for all the info about S-meters, etc.
I only set the meter on mine for S-9 at 100 microvolts at first because that's how the service manual for my TS-830S tells you to do it (without a 50 ohm load at the antenna connector), if I am interpreting it correctly. That method seems to work OK for that radio, but not so good for an R-4A.

The way I have it now, it reads S-9 for even less than 30 microvolts, but it seems to read around where I like it when listening on the air. Checking it again with a signal generator, it doesn't seem to be quite as non-linear as I first thought, so I don't think there is a problem with the radio. (I did a re-alignment of the RF and IF sections since, so that might have helped.)

I guess it is mostly a relative thing, so probably the best thing to do is set it where you like it.

73,
Al

12684. Re: [DrakeRadio] Re: R-4A S-meter linearity

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 16:16:03 UTC
From: Richard Knoppow
Topic: 12670 Message: 12684

----- Original Message -----
From: "Al Schichler" <aschichler@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 19, 2013 8:47 AM
Subject: [DrakeRadio] Re: R-4A S-meter linearity

> Thanks for all the info about S-meters, etc.
> I only set the meter on mine for S-9 at 100 microvolts at
> first because
> that's how the service manual for my TS-830S tells you to
> do it (without
> a 50 ohm load at the antenna connector), if I am
> interpreting it
> correctly. That method seems to work OK for that radio,
> but not so good
> for an R-4A.
>
> The way I have it now, it reads S-9 for even less than 30
> microvolts,
> but it seems to read around where I like it when listening
> on the air.
> Checking it again with a signal generator, it doesn't seem
> to be quite
> as non-linear as I first thought, so I don't think there
> is a problem
> with the radio. (I did a re-alignment of the RF and IF
> sections since,
> so that might have helped.)
>
> I guess it is mostly a relative thing, so probably the
> best thing to do
> is set it where you like it.
>
> 73,
> Al
>
Kenwood may assume that the generator is calibrated for
open circuit voltage. Assuming it does and has 50 ohm
source impedance, and assuming the receiver presents a 50
ohm load, the voltage across the antenna terminal will be
half the indicated value or 50uV. Now, my Hewlett-Packard
606A reads the voltage across a _terminated_ output but my
General Radio 1001-A indicates the open circuit voltage and
must be halved for a terminated connection. If Kenwood
specifies what generator they used for the adjustment you

may be able to find out how its calibrated. AFAIK there is really no standard for S-9 although 50uV seems to be a sort of defacto standard. Older receivers used anything from 25 to 100 uV but also many older receivers could adjusted to read whatever you liked. It is common practice now to have antenna systems running at 50 ohms but in the past all sorts of impedances were used and most receivers had inputs of around 200 ohms. So, the actual voltage at the terminal could vary over quite a range for the same signal strength, hence the adjustable meter.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12685. SCSI cable needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 02:00:26 UTC
From: Jim Wiley
Topic: 12685 Message: 12685

Looking for a 50-pin to 50-pin male to male SCSI type cable at least 6 feet long, longer is OK. This would be the "old" style cable with 3 rows of pins in the connector, sometimes also known as a D-sub type connector (similar to a DB-25, but more pins). Standard density pin arrangement (specifically not high density) and nota ribbon cable as used inside a computer to connect hard drives and such. The connector body inside the shell is approximately 2 inches long, and about 3/8 inches (or a bit more) wide.

Application is for aantenna switch project I am working on.

Anyone out there happen to have such an item in their junk box? Sell or trade?

- Jim, KL7CC

[Non-text portions of this message have been removed]

12686. rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 02:40:37 UTC
From: milton_valerio
Topic: 12686 Message: 12686

Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??

12687. Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 11:15:44 UTC
From: Tom
Topic: 12686 Message: 12687

--- In DrakeRadio@yahoogroups.com, "milton_valerio" <milton_valerio@...> wrote:
>
> Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??
>
I don't know about the PTO bushing, but if you'll check www.2bradioparts.com , they have a very nice set of the blue filters with the white diffusers for about 8 bucks. One set will do 2 radios. I have ordered several sets for my TR4's. Very nice.

Tom AG4B

12688. Re: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 12:14:05 UTC
From: Chgypsy@...
Topic: 12686 Message: 12688

milton_valerio@... writes:

Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??

TR4-C rubber bushing per discussions was a piece of fuel line or vacuum hose as I recall. I am sure that someone will reply. As for the blue lenses, the other Drake list has a lot in archives, and perhaps this one does also....probably on both items. Carl wd8nhk

[Non-text portions of this message have been removed]

12689. Re: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 12:57:30 UTC
From: Steve Wedge
Topic: 12686 Message: 12689

http://www.2bradioparts.com/page11.html for the blue filter material is probably the easiest.

I've heard that a short length of automotive vacuum hose will work for the bushing.

Good luck!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: milton_valerio
Sent: Tuesday, March 19, 2013 10:40 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??

Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??

[Non-text portions of this message have been removed]

12690. Re: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 13:03:02 UTC
From: Steve Wedge
Topic: 12686 Message: 12690

I meant to also mention that 2bradioparts also has the bushing already cut for you.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: milton_valerio
Sent: Tuesday, March 19, 2013 10:40 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??

Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??

[Non-text portions of this message have been removed]

12691. Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 13:32:35 UTC
From: slowcountry1
Topic: 12654 Message: 12691

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> slowcountry1 wrote:
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> First of all, get rid of the fan blowing IN. All this does is blow hot air inside theradio, heating
> >>>> and cooling with transmit and receive conditions. Get the hot air OUT and AWAY from the radio.
> >>>>
> >>>> Did you do the grounding braid in theRV-4C? None ofthe oscillators 'should' be changing from
> >>>> transmit to receive. Obviously if the RV-4C is controlling receive, it can be on a different
> >>>> frequency than the TR-4Cw.
> >>>>
> >>>> I would say....
> >>>>
> >>>> 1. Measure the regulated +150 in transmit and receive, ensure that it stays 'lit' and the voltage
> >>>> stays still!
> >>>>
> >>>> 2. Measure the voltage at each of the PTO's to ensure that voltagestays constant.
> >>>>
> >>>> 3. DeoxIT the slide switch on the left side.
> >>>>
> >>>> 4. Replace U1, MC14016BCP. Any of the CMOS *4016* ICs will do.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> All, sorry for the plethora of posts; I mistakenly thought I had all of the bugs worked out of my system but I was proven wrong.
> >>>>>
> >>>>> Last evening the rig's receive and transmit decided not to track with one another. The VFO, once the unit was at stable temperature, very seldom if ever drifts. Now the

transmit and receive are jumping around; when they jump or drift, they do not jump together. I did the PTO grounding this morning; this did not have any effect.
> >>>>>
> >>>>> I have a small computer fan mounted on the back of the rig to push air into the PA and I have a larger fan on top of the PA sucking the air out. This is how I had it set up when I used to run it on a regular basis; frequency drift was very very minimal with this setup.
> >>>>>
> >>>>> The setup is as follows; TR-4Cw, RV-4C and L-4. This issue occurs with the RV-4C controlling receive or turned off. This does not change the drift and separation of transmit and receive. I have the pieces of equipment on my desk side by each with about 2" of separation between them.
> >>>>>
> >>>>> Any thoughts on where to start looking?
> >>>>>
> >>>>> Doug Coffman
> >>>>> N9XTF
> >>>>>
> >>>>>
> >>>>>
> >>> Garey,
> >>>
> >>> I will definatly check those points. To clarify, if the rig is controlling both transmit and receive, remote VFO off, this condition occurs. If I use the remote VFO to control both the same problem exists. Transmit and receive drift but not together. Transmit frequency may change while receive frequency stays stable and sometimes it works the other way.
> >>>
> >>> I had not grounded the the PTO on the RV-4C until just a few minutes ago. I will remove the fan blowing into the PA cage.
> >>>
> >>> Thanks again,
> >>>
> >>> Doug
> >>>
> >> Doug -
> >>
> >> OK. The fact that it's the same with either one eliminates the PTOs as a source. The other two
> >> oscillators that determine frequency on transmit and receiveare both crystal controlled, and should
> >> NOT move. Does the frequency 'drift' or does it 'jump'.?
> >>
> >> I'm leaning more and more to the MC14016 IC. You can disconnect the RIT line from the side of the
> >> PTO, just behind the gearbox. The dial calibration will be off a bit, but see if that 'fixes' the
> >> instability.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA

> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> > Garey,
> >
> > The frequency jumps pretty quickly. RIT line? Is this present on the TR-4Cw? Mine does not have rit.
> >
> >
> >
> >
> Doug -
>
> Sorry..... Wrong radio! :-)
>
> Does it do this on 80/20, other bands, or both?
>
> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
>
> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
> soaked with DeoxIT, through N.O. and N.C. contacts.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

Garey,

Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.

TR-4Cw checks 03/19/2013

Frequency sliding while transmit, receive frequency quick jump
1. Measured 150VDC regulated power at pin 1 of V20 during receive and transmit over a 20 minute period.
a. Receive voltage +148.46VDC
b. Transmit voltage +148.23VDC
2. Measured +10.92VDC at the PTO
a. No change from transmit to receive
3. Clean open frame relay at back of radio with business card and DeOxit
a. Results caused a different audio tone when the contact was moved slightly
4. Burnished open frame relay contacts with 800grit wet dry paper with DeOxit

a. Slight burr appeared to be present
b. Results caused audio tone to stay stable when the contact was moved slightly
c. Receive frequency doesn't appear to jump or drift
Transmit frequency continues to "slide" while transmitting
1. Listened to 9Mhz oscillator while transmitting ☐ No change in tone
2. Listened to VFO frequency at 5.172.505MHz while transmitting on 28.325MHz ☐ No change in tone.
3. Listened to crystal frequencies 21.5, 35.5, 42.5, 43 and 43.6. Crystals 21.5 and 35.5 produced a constant tone while 42.5, 43 and 43.6 crystals oscillated in tone and signal strength. Transmit characteristics were the same.
a. All crystals, tone could not be found at specified frequency; had to tune receiver well below the specified frequency.
4. Performed Injection Crystal Oscillator Calibration using Fluke 289
a. Connected positive lead to T.P. and negative lead to chassis
i. 7MHz displayed a positive value, adjusted to -1.165 VDC
ii. 21MHz start value +1.386VDC adjusted to -.7507VDC
iii. 29MHz start value +2.187VDC adjusted to -.2770VDC
b. Listening to crystal oscillator now 21.5 and 35.5 produces tone directly on frequency ☐ Stable tone
c. Listening to 42.5 produces stable tone at 42.498
d. Listening to 43.0 produces stable tone at 42.998
e. Listening to 43.6 produces stable tone at 43.598
i. Tones produced are stable in both transmit and receive

Instruments used;
1. Fluke 289 True RMS DMM
2. Yaesu FT-847 to listen to oscillator frequencies

Results on transmit;
1. Unable to monitor transmit audio, no headphones
2. No local operators on frequency at this time. Will check when time permits.

12692. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 14:54:14 UTC
From: Garey Barrell
Topic: 12654 Message: 12692

>> Doug -
>>
>> Sorry..... Wrong radio! :-)
>>
>> Does it do this on 80/20, other bands, or both?
>>
>> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
>>
>> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
>> soaked with DeoxIT, through N.O. and N.C. contacts.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
> Garey,
>
> Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.
>
> TR-4Cw checks 03/19/2013
>
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> a. Receive voltage +148.46VDC
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> 2. Measured +10.92VDC at the PTO
> a. No change from transmit to receive
> 3. Clean open frame relay at back of radio with business card and DeOxit
> a. Results caused a different audio tone when the contact was moved slightly
> 4. Burnished open frame relay contacts with 800grit wet dry paper with DeOxit
> a. Slight burr appeared to be present
> b. Results caused audio tone to stay stable when the contact was moved slightly
> c. Receive frequency doesn't appear to jump or drift
> Transmit frequency continues to "slide" while transmitting
> 1. Listened to 9Mhz oscillator while transmitting ? No change in tone
> 2. Listened to VFO frequency at 5.172.505MHz while transmitting on 28.325MHz ? No change

in tone.
> 3. Listened to crystal frequencies 21.5, 35.5, 42.5, 43 and 43.6. Crystals 21.5 and 35.5 produced a constant tone while 42.5, 43 and 43.6 crystals oscillated in tone and signal strength. Transmit characteristics were the same.
> a. All crystals, tone could not be found at specified frequency; had to tune receiver well below the specified frequency.
> 4. Performed Injection Crystal Oscillator Calibration using Fluke 289
> a. Connected positive lead to T.P. and negative lead to chassis
> i. 7MHz displayed a positive value, adjusted to -1.165 VDC
> ii. 21MHz start value +1.386VDC adjusted to -.7507VDC
> iii. 29MHz start value +2.187VDC adjusted to -.2770VDC
> b. Listening to crystal oscillator now 21.5 and 35.5 produces tone directly on frequency ? Stable tone
> c. Listening to 42.5 produces stable tone at 42.498
> d. Listening to 43.0 produces stable tone at 42.998
> e. Listening to 43.6 produces stable tone at 43.598
> i. Tones produced are stable in both transmit and receive
>
> Instruments used;
> 1. Fluke 289 True RMS DMM
> 2. Yaesu FT-847 to listen to oscillator frequencies
>
> Results on transmit;
> 1. Unable to monitor transmit audio, no headphones
> 2. No local operators on frequency at this time. Will check when time permits.
>
>
Doug -

I'm interested how you managed to change the oscillator voltages in 4.? I thought you had already done the alignment procedure?? Section 5-10?? Same question, how did you pull the frequency of the three 10M crystals?? Certainly this oscillator can be unstable if L1, 2 & 5 alignment is not done..... You can sacrifice some small stability for frequency accuracy as long as you don't have to move it too far...

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12693. early ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:02:05 UTC
From: dalepavlicek
Topic: 12693 Message: 12693

Does any one have a early ac-3 schematic? this is the ac-3 with the filter choke and all the components mounted below the chassis.
thanks
dale wt4t

12694. early ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:02:25 UTC
From: dalepavlicek
Topic: 12693 Message: 12694

Does any one have a early ac-3 schematic? this is the ac-3 with the filter choke and all the components mounted below the chassis.
thanks
dale wt4t

12695. early ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:02:25 UTC
From: dalepavlicek
Topic: 12693 Message: 12695

Does any one have a early ac-3 schematic? this is the ac-3 with the filter choke and all the components mounted below the chassis.
thanks
dale wt4t

12696. Re: [DrakeRadio] early ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:11:41 UTC
From: yash@aol.com
Topic: 12693 Message: 12696

sorry for the triple post ,don't know why it did it.
dale

-----Original Message-----
From: dalepavlicek <yash@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Wed, Mar 20, 2013 11:02 am
Subject: [DrakeRadio] early ac-3

Does any one have a early ac-3 schematic? this is the ac-3 with the filter choke and all the components mounted below the chassis.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12697. Re: [DrakeRadio] early ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:21:27 UTC
From: Garey Barrell
Topic: 12693 Message: 12697

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dalepavlicek wrote:
> Does any one have a early ac-3 schematic? this is the ac-3 with the filter choke and all the components mounted below the chassis.
> thanks
> dale wt4t
>
>

[Non-text portions of this message have been removed]

12698. Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 15:55:08 UTC
From: milton_valerio
Topic: 12686 Message: 12698

Thanks a lot guys, I've never heard of these site but certainly he has what I was looking for the rubber sleeve and the blue plastic.
73.

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> http://www.2bradioparts.com/page11.html for the blue filter material is probably the easiest.
>
> I've heard that a short length of automotive vacuum hose will work for the bushing.
>
> Good luck!
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: milton_valerio
> Sent: Tuesday, March 19, 2013 10:40 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] rubber bushing on TR4C PTO and blue plastic sources??
>
>
>
> Gents, does anyone know where to get the blue plastic for the dial and a new rubber bushing for the PTO shaft??
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

12699. Re: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 16:08:14 UTC
From: Don Cunningham
Topic: 12686 Message: 12699

Besides having the parts, Donnie is one of the "good guys" selling things for our old rigs.
No connection, just have known Donnie a long time and pleased with his products!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2904 / Virus Database: 2641/6191 - Release Date: 03/20/13

[Non-text portions of this message have been removed]

12700. RE: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 16:25:50 UTC
From: Rich Arland
Topic: 12686 Message: 12700

I totally concur with Don! I have used Don's site for restoral of my Drake 2B/2BQ.

Just orded about $40 worth of parts to restore two (2) TR-4s, one of which is going to a bush pilot buddy of mine in Alaska, so it HAS to work!!

Great hard-to-find parts resource.

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

Besides having the parts, Donnie is one of the "good guys" selling things for our old rigs.

No connection, just have known Donnie a long time and pleased with his products!!!

73,

Don, WB5HAK

[Non-text portions of this message have been removed]

12701. Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 18:12:49 UTC
From: slowcountry1
Topic: 12654 Message: 12701

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> >> Doug -
> >>
> >> Sorry..... Wrong radio! :-)
> >>
> >> Does it do this on 80/20, other bands, or both?
> >>
> >> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
> >>
> >> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
> >> soaked with DeoxIT, through N.O. and N.C. contacts.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> > Garey,
> >
> > Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.
> >
> > TR-4Cw checks 03/19/2013
> >
> > Frequency sliding while transmit, receive frequency quick jump
> > 1. Measured 150VDC regulated power at pin 1 of V20 during receive and transmit over a 20 minute period.
> > a. Receive voltage +148.46VDC
> > b. Transmit voltage +148.23VDC
> > 2. Measured +10.92VDC at the PTO
> > a. No change from transmit to receive
> > 3. Clean open frame relay at back of radio with business card and DeOxit
> > a. Results caused a different audio tone when the contact was moved slightly
> > 4. Burnished open frame relay contacts with 800grit wet dry paper with DeOxit
> > a. Slight burr appeared to be present
> > b. Results caused audio tone to stay stable when the contact was moved slightly
> > c. Receive frequency doesn't appear to jump or drift
> > Transmit frequency continues to "slide" while transmitting
> > 1. Listened to 9Mhz oscillator while transmitting ☐ No change in tone
> > 2. Listened to VFO frequency at 5.172.505MHz while transmitting on 28.325MHz ☐ No change in tone.
> > 3. Listened to crystal frequencies 21.5, 35.5, 42.5, 43 and 43.6. Crystals 21.5 and 35.5 produced a constant tone

while 42.5, 43 and 43.6 crystals oscillated in tone and signal strength. Transmit characteristics were the same.
> > a. All crystals, tone could not be found at specified frequency; had to tune receiver well below the specified frequency.
> > 4. Performed Injection Crystal Oscillator Calibration using Fluke 289
> > a. Connected positive lead to T.P. and negative lead to chassis
> > i. 7MHz displayed a positive value, adjusted to -1.165 VDC
> > ii. 21MHz start value +1.386VDC adjusted to -.7507VDC
> > iii. 29MHz start value +2.187VDC adjusted to -.2770VDC
> > b. Listening to crystal oscillator now 21.5 and 35.5 produces tone directly on frequency ☐ Stable tone
> > c. Listening to 42.5 produces stable tone at 42.498
> > d. Listening to 43.0 produces stable tone at 42.998
> > e. Listening to 43.6 produces stable tone at 43.598
> > i. Tones produced are stable in both transmit and receive
> >
> > Instruments used;
> > 1. Fluke 289 True RMS DMM
> > 2. Yaesu FT-847 to listen to oscillator frequencies
> >
> > Results on transmit;
> > 1. Unable to monitor transmit audio, no headphones
> > 2. No local operators on frequency at this time. Will check when time permits.
> >
> >
> Doug -
>
> I'm interested how you managed to change the oscillator voltages in
> 4.? I thought you had already done the alignment procedure?? Section
> 5-10?? Same question, how did you pull the frequency of the three 10M
> crystals?? Certainly this oscillator can be unstable if L1, 2 & 5
> alignment is not done..... You can sacrifice some small stability for
> frequency accuracy as long as you don't have to move it too far...
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
Garey,

I have not done an alignment; I do not have a VTVM or a 1 meg ohm probe to do an alignment with. I did align the 9MHz oscillator as described by adjusting C130 for the same pitch on USB and LSB. I did neutralize the PA, with a minor compromise on 28.400 as described in one of my other posts.

To change the oscillator voltages, I connected the positive lead to the test point connected to V1 and the negative lead to the chassis. I read the voltages described earlier and adjusted L1, L5 and L2 for maximum negative voltages. These voltages were all positive prior to adjustment. Prior to adjustment, listening to the crystal frequencies, the 10 crystals all had a warbling tone with increasing and decreasing intensity. After adjusting

the voltages, they all produced a stable tone and tone could be found close to the stated crystal frequency; previously they were well below the stated frequency.

As far as how did I pull the frequency of the 10M crystals; I have no Idea, all of the crystal frequencies came up in frequency when I adjusted the voltage measured to maximum negative voltage as directed in section 5-10 of the manual.

To check the 9MHz oscillator, frequency crystals and the VFO frequency, I attached a jumper to the HF jack on my FT-847 and laid the other end next to the item I wanted to listen to. I then set the frequency on the FT-847 so that a sharp tone was present, at or near strongest S Meter reading on the 847. I then began transmitting on the TR-4Cw to see if there was a change in pitch. After adjusting the voltages at L1,L2 and L5 the crystal tone produced, VFO tone produced and 9MHz oscillator tone produced were all constant in both transmit and receive.

After burnishing the open frame relay, receive frequency drift seems to have stopped jumping. I have not found anyone to talk to yet that can report on the transmit signal. Last night, it was sliding up and down while transmitting, it was reported to be a smooth slide up and down, not a sharp change. I do not know if it is solved; hopefully when some local folks get home from work this evening, I will be able to test this out.

Have I incorrectly measured the voltages and or oscillator frequencies?

Thanks,

Doug Coffman
N9XTF

12702. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 18:57:50 UTC
From: Garey Barrell
Topic: 12654 Message: 12702

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>>> Doug -
>>>>
>>>> Sorry..... Wrong radio! :-)
>>>>
>>>> Does it do this on 80/20, other bands, or both?
>>>>
>>>> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
>>>>
>>>> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
>>>> soaked with DeoxIT, through N.O. and N.C. contacts.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>> Garey,
>>>
>>> Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.
>>>
>>> TR-4Cw checks 03/19/2013
>>>
>>> Frequency sliding while transmit, receive frequency quick jump
>>> 1. Measured 150VDC regulated power at pin 1 of V20 during receive and transmit over a 20 minute period.
>>> a. Receive voltage +148.46VDC
>>> b. Transmit voltage +148.23VDC
>>> 2. Measured +10.92VDC at the PTO
>>> a. No change from transmit to receive
>>> 3. Clean open frame relay at back of radio with business card and DeOxit
>>> a. Results caused a different audio tone when the contact was moved slightly
>>> 4. Burnished open frame relay contacts with 800grit wet dry paper with DeOxit
>>> a. Slight burr appeared to be present
>>> b. Results caused audio tone to stay stable when the contact was moved slightly
>>> c. Receive frequency doesn't appear to jump or drift

>>> Transmit frequency continues to "slide" while transmitting
>>> 1. Listened to 9Mhz oscillator while transmitting ? No change in tone
>>> 2. Listened to VFO frequency at 5.172.505MHz while transmitting on 28.325MHz ? No change in tone.
>>> 3. Listened to crystal frequencies 21.5, 35.5, 42.5, 43 and 43.6. Crystals 21.5 and 35.5 produced a constant tone while 42.5, 43 and 43.6 crystals oscillated in tone and signal strength. Transmit characteristics were the same.
>>> a. All crystals, tone could not be found at specified frequency; had to tune receiver well below the specified frequency.
>>> 4. Performed Injection Crystal Oscillator Calibration using Fluke 289
>>> a. Connected positive lead to T.P. and negative lead to chassis
>>> i. 7MHz displayed a positive value, adjusted to -1.165 VDC
>>> ii. 21MHz start value +1.386VDC adjusted to -.7507VDC
>>> iii. 29MHz start value +2.187VDC adjusted to -.2770VDC
>>> b. Listening to crystal oscillator now 21.5 and 35.5 produces tone directly on frequency ? Stable tone
>>> c. Listening to 42.5 produces stable tone at 42.498
>>> d. Listening to 43.0 produces stable tone at 42.998
>>> e. Listening to 43.6 produces stable tone at 43.598
>>> i. Tones produced are stable in both transmit and receive
>>>
>>> Instruments used;
>>> 1. Fluke 289 True RMS DMM
>>> 2. Yaesu FT-847 to listen to oscillator frequencies
>>>
>>> Results on transmit;
>>> 1. Unable to monitor transmit audio, no headphones
>>> 2. No local operators on frequency at this time. Will check when time permits.
>>>
>>>
>> Doug -
>>
>> I'm interested how you managed to change the oscillator voltages in
>> 4.? I thought you had already done the alignment procedure?? Section
>> 5-10?? Same question, how did you pull the frequency of the three 10M
>> crystals?? Certainly this oscillator can be unstable if L1, 2 & 5
>> alignment is not done..... You can sacrifice some small stability for
>> frequency accuracy as long as you don't have to move it too far...
>>
>> 73, Garey - K4OAH
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>> <www.k4oah.com>
>>
> Garey,
>
> I have not done an alignment; I do not have a VTVM or a 1 meg ohm probe to do an alignment with. I did align the 9MHz oscillator as described by adjusting C130 for the same

pitch on USB and LSB. I did neutralize the PA, with a minor compromise on 28.400 as described in one of my other posts.
>
> To change the oscillator voltages, I connected the positive lead to the test point connected to V1 and the negative lead to the chassis. I read the voltages described earlier and adjusted L1, L5 and L2 for maximum negative voltages. These voltages were all positive prior to adjustment. Prior to adjustment, listening to the crystal frequencies, the 10 crystals all had a warbling tone with increasing and decreasing intensity. After adjusting the voltages, they all produced a stable tone and tone could be found close to the stated crystal frequency; previously they were well below the stated frequency.
>
> As far as how did I pull the frequency of the 10M crystals; I have no Idea, all of the crystal frequencies came up in frequency when I adjusted the voltage measured to maximum negative voltage as directed in section 5-10 of the manual.
>
> To check the 9MHz oscillator, frequency crystals and the VFO frequency, I attached a jumper to the HF jack on my FT-847 and laid the other end next to the item I wanted to listen to. I then set the frequency on the FT-847 so that a sharp tone was present, at or near strongest S Meter reading on the 847. I then began transmitting on the TR-4Cw to see if there was a change in pitch. After adjusting the voltages at L1,L2 and L5 the crystal tone produced, VFO tone produced and 9MHz oscillator tone produced were all constant in both transmit and receive.
>
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>
> Have I incorrectly measured the voltages and or oscillator frequencies?
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
>

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug -

OK, my mistake. Yes, if those inductors are not tuned properly, the
BAND oscillator can be unstable. I must have this project confused
with another one, as I thought you had done the alignment.

You can do the alignment, you only need the VTVM for oscillating stages, and in the TR-4Cw the Grid of the BAND oscillator is at RF ground so is not confused by loading from any good hi-Z meter.

Your measurements are fine, and sounds like you have K2 straightened out. K2 controls the shift of the 9.00 MHz Carrier OSC between CW and SSB so can cause shifting, particularly on SSB.

I think the relay work probably took care of the 'drift' on SSB since I assume your 'local' QSOs were done on the lower bands.

What's next??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12703. Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 19:15:47 UTC
From: slowcountry1
Topic: 12654 Message: 12703

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> Sorry..... Wrong radio! :-)
> >>>>
> >>>> Does it do this on 80/20, other bands, or both?
> >>>>
> >>>> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
> >>>>
> >>>> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
> >>>> soaked with DeoxIT, through N.O. and N.C. contacts.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>>> <www.k4oah.com>
> >>>>
> >>> Garey,
> >>>
> >>> Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.
> >>>
> >>> TR-4Cw checks 03/19/2013
> >>>
> >>> Frequency sliding while transmit, receive frequency quick jump
> >>> 1. Measured 150VDC regulated power at pin 1 of V20 during receive and transmit over a 20 minute period.
> >>> a. Receive voltage +148.46VDC
> >>> b. Transmit voltage +148.23VDC
> >>> 2. Measured +10.92VDC at the PTO
> >>> a. No change from transmit to receive
> >>> 3. Clean open frame relay at back of radio with business card and DeOxit
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> >>> a. Slight burr appeared to be present
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> >>> c. Receive frequency doesn't appear to jump or drift
> >>> Transmit frequency continues to "slide" while transmitting

> >>> 1. Listened to 9Mhz oscillator while transmitting ☐ No change in tone
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> >>> c. Listening to 42.5 produces stable tone at 42.498
> >>> d. Listening to 43.0 produces stable tone at 42.998
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> >>> Instruments used;
> >>> 1. Fluke 289 True RMS DMM
> >>> 2. Yaesu FT-847 to listen to oscillator frequencies
> >>>
> >>> Results on transmit;
> >>> 1. Unable to monitor transmit audio, no headphones
> >>> 2. No local operators on frequency at this time. Will check when time permits.
> >>>
> >>>
> >> Doug -
> >>
> >> I'm interested how you managed to change the oscillator voltages in
> >> 4.? I thought you had already done the alignment procedure?? Section
> >> 5-10?? Same question, how did you pull the frequency of the three 10M
> >> crystals?? Certainly this oscillator can be unstable if L1, 2 & 5
> >> alignment is not done..... You can sacrifice some small stability for
> >> frequency accuracy as long as you don't have to move it too far...
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> >> Glen Allen, VA
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> > Garey,
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> > I have not done an alignment; I do not have a VTVM or a 1 meg ohm probe to do an alignment with. I did align the 9MHz oscillator as described by adjusting C130 for the same pitch on USB and LSB. I did neutralize the PA, with a minor compromise on 28.400 as described in one of my other posts.
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lead to the chassis. I read the voltages described earlier and adjusted L1, L5 and L2 for maximum negative voltages. These voltages were all positive prior to adjustment. Prior to adjustment, listening to the crystal frequencies, the 10 crystals all had a warbling tone with increasing and decreasing intensity. After adjusting the voltages, they all produced a stable tone and tone could be found close to the stated crystal frequency; previously they were well below the stated frequency.
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> > To check the 9MHz oscillator, frequency crystals and the VFO frequency, I attached a jumper to the HF jack on my FT-847 and laid the other end next to the item I wanted to listen to. I then set the frequency on the FT-847 so that a sharp tone was present, at or near strongest S Meter reading on the 847. I then began transmitting on the TR-4Cw to see if there was a change in pitch. After adjusting the voltages at L1,L2 and L5 the crystal tone produced, VFO tone produced and 9MHz oscillator tone produced were all constant in both transmit and receive.
> >
> > After burnishing the open frame relay, receive frequency drift seems to have stopped jumping. I have not found anyone to talk to yet that can report on the transmit signal. Last night, it was sliding up and down while transmitting, it was reported to be a smooth slide up and down, not a sharp change. I do not know if it is solved; hopefully when some local folks get home from work this evening, I will be able to test this out.
> >
> > Have I incorrectly measured the voltages and or oscillator frequencies?
> >
> > Thanks,
> >
> > Doug Coffman
> > N9XTF
> >
> >
>
> 73, Garey - K4OAH
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>
> Doug -
>
> OK, my mistake. Yes, if those inductors are not tuned properly, the
> BAND oscillator can be unstable. I must have this project confused
> with another one, as I thought you had done the alignment.
>
> You can do the alignment, you only need the VTVM for oscillating
> stages, and in the TR-4Cw the Grid of the BAND oscillator is at RF
> ground so is not confused by loading from any good hi-Z meter.
>
> Your measurements are fine, and sounds like you have K2 straightened
> out. K2 controls the shift of the 9.00 MHz Carrier OSC between CW and
> SSB so can cause shifting, particularly on SSB.

>
> I think the relay work probably took care of the 'drift' on SSB since
> I assume your 'local' QSOs were done on the lower bands.
>
> What's next??
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

Garey,

Local communications have been on 10M. I lost my 80M dipole several years ago and since I hadn't operated in some time, I haven't installed anything for the lower bands yet.

After working on K2, the receive jumping / drifting appears to have stopped. The transmit frequency has been drifting while talking. This was not solved by working on K2. I'm hoping that the alignment of the crystal oscillator has taken care of this but until I can talk to someone on 10M, I cannot verify this.

I would like to try to align the rest of the radio but this won't happen until I can acquire the appropriate meter or probe to do so. I will also need some tutoring prior to screwing something up. I didn't know if I could get away with using a 1 meg ohm probe connected to my Fluke to do this satisfactorily or not.

After working all the bugs back out of what used to be a smooth operating rig, I would like to remove the old cigarette tar and dust as a final step. I attempted to wipe a portion of it down with a dry cloth but the lettering at the tubes came off. You discussed re-lettering and may just have to clean it with a dry cloth and suffer the consequences.

Thanks,

Doug Coffman
N9XTF

12704. Re: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 19:31:44 UTC
From: Richard Knoppow
Topic: 12686 Message: 12704

----- Original Message -----
From: "milton_valerio" <milton_valerio@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 20, 2013 8:55 AM
Subject: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

> Thanks a lot guys, I've never heard of these site but
> certainly he has what I was looking for the rubber sleeve
> and the blue plastic.
> 73.
>
Lee Lagoon Blue, No.172, is about identical to the material used by Drake. Its available at places that sell photographic or theatrical lighting. See the Lee web site at:

http://leefilters.com/lighting/colour-list.htm

The gel can be cut with scissors and the holes for the screws punched with an ordinary paper punch.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12705. Blue plastic

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 19:35:11 UTC
From: Lawrence Steeno
Topic: 12705 Message: 12705

This plastic can be gotten for about a buck for a square foot at a hobby supply shop.
Larry K9LWI

[Non-text portions of this message have been removed]

12706. Re: [DrakeRadio] Re: TR-4Cw Transmit and Receive not tracking together

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 19:41:44 UTC
From: Garey Barrell
Topic: 12654 Message: 12706

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> slowcountry1 wrote:
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> Sorry..... Wrong radio! :-)
>>>>>>
>>>>>> Does it do this on 80/20, other bands, or both?
>>>>>>
>>>>>> Ifyou have an external receiver that covers 9 MHz you can listen to the Carrier Osc.
>>>>>>
>>>>>> Clean contacts of K2, back wall near left side looking from front. Pull business card or paper,
>>>>>> soaked with DeoxIT, through N.O. and N.C. contacts.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>> Garey,
>>>>>
>>>>> Below are the checks and adjustments made. A fellow local ham directed me to listen to all of the oscillators and what to listen for; the only thing that appeared to be amiss were the band crystals. At this time, I do not know if the problem is solved but I have provided my findings for your review and comment.
>>>>>
>>>>> TR-4Cw checks 03/19/2013
>>>>>
>>>>> Frequency sliding while transmit, receive frequency quick jump
>>>>> 1. Measured 150VDC regulated power at pin 1 of V20 during receive and transmit over a 20 minute period.
>>>>> a. Receive voltage +148.46VDC
>>>>> b. Transmit voltage +148.23VDC
>>>>> 2. Measured +10.92VDC at the PTO
>>>>> a. No change from transmit to receive
>>>>> 3. Clean open frame relay at back of radio with business card and DeOxit
>>>>> a. Results caused a different audio tone when the contact was moved slightly
>>>>> 4. Burnished open frame relay contacts with 800grit wet dry paper with DeOxit
>>>>> a. Slight burr appeared to be present

>>>>> b. Results caused audio tone to stay stable when the contact was moved slightly
>>>>> c. Receive frequency doesn't appear to jump or drift
>>>>> Transmit frequency continues to "slide" while transmitting
>>>>> 1. Listened to 9Mhz oscillator while transmitting ? No change in tone
>>>>> 2. Listened to VFO frequency at 5.172.505MHz while transmitting on 28.325MHz ? No change in tone.
>>>>> 3. Listened to crystal frequencies 21.5, 35.5, 42.5, 43 and 43.6. Crystals 21.5 and 35.5 produced a constant tone while 42.5, 43 and 43.6 crystals oscillated in tone and signal strength. Transmit characteristics were the same.
>>>>> a. All crystals, tone could not be found at specified frequency; had to tune receiver well below the specified frequency.
>>>>> 4. Performed Injection Crystal Oscillator Calibration using Fluke 289
>>>>> a. Connected positive lead to T.P. and negative lead to chassis
>>>>> i. 7MHz displayed a positive value, adjusted to -1.165 VDC
>>>>> ii. 21MHz start value +1.386VDC adjusted to -.7507VDC
>>>>> iii. 29MHz start value +2.187VDC adjusted to -.2770VDC
>>>>> b. Listening to crystal oscillator now 21.5 and 35.5 produces tone directly on frequency ? Stable tone
>>>>> c. Listening to 42.5 produces stable tone at 42.498
>>>>> d. Listening to 43.0 produces stable tone at 42.998
>>>>> e. Listening to 43.6 produces stable tone at 43.598
>>>>> i. Tones produced are stable in both transmit and receive
>>>>>
>>>>> Instruments used;
>>>>> 1. Fluke 289 True RMS DMM
>>>>> 2. Yaesu FT-847 to listen to oscillator frequencies
>>>>>
>>>>> Results on transmit;
>>>>> 1. Unable to monitor transmit audio, no headphones
>>>>> 2. No local operators on frequency at this time. Will check when time permits.
>>>>>
>>>>>
>>>> Doug -
>>>>
>>>> I'm interested how you managed to change the oscillator voltages in
>>>> 4.? I thought you had already done the alignment procedure?? Section
>>>> 5-10?? Same question, how did you pull the frequency of the three 10M
>>>> crystals?? Certainly this oscillator can be unstable if L1, 2 & 5
>>>> alignment is not done..... You can sacrifice some small stability for
>>>> frequency accuracy as long as you don't have to move it too far...
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>> Garey,
>>>

>>> I have not done an alignment; I do not have a VTVM or a 1 meg ohm probe to do an alignment with. I did align the 9MHz oscillator as described by adjusting C130 for the same pitch on USB and LSB. I did neutralize the PA, with a minor compromise on 28.400 as described in one of my other posts.
>>>
>>> To change the oscillator voltages, I connected the positive lead to the test point connected to V1 and the negative lead to the chassis. I read the voltages described earlier and adjusted L1, L5 and L2 for maximum negative voltages. These voltages were all positive prior to adjustment. Prior to adjustment, listening to the crystal frequencies, the 10 crystals all had a warbling tone with increasing and decreasing intensity. After adjusting the voltages, they all produced a stable tone and tone could be found close to the stated crystal frequency; previously they were well below the stated frequency.
>>>
>>> As far as how did I pull the frequency of the 10M crystals; I have no Idea, all of the crystal frequencies came up in frequency when I adjusted the voltage measured to maximum negative voltage as directed in section 5-10 of the manual.
>>>
>>> To check the 9MHz oscillator, frequency crystals and the VFO frequency, I attached a jumper to the HF jack on my FT-847 and laid the other end next to the item I wanted to listen to. I then set the frequency on the FT-847 so that a sharp tone was present, at or near strongest S Meter reading on the 847. I then began transmitting on the TR-4Cw to see if there was a change in pitch. After adjusting the voltages at L1,L2 and L5 the crystal tone produced, VFO tone produced and 9MHz oscillator tone produced were all constant in both transmit and receive.
>>>
>>> After burnishing the open frame relay, receive frequency drift seems to have stopped jumping. I have not found anyone to talk to yet that can report on the transmit signal. Last night, it was sliding up and down while transmitting, it was reported to be a smooth slide up and down, not a sharp change. I do not know if it is solved; hopefully when some local folks get home from work this evening, I will be able to test this out.
>>>
>>> Have I incorrectly measured the voltages and or oscillator frequencies?
>>>
>>> Thanks,
>>>
>>> Doug Coffman
>>> N9XTF
>>>
>>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> <www.k4oah.com>
>>
>> Doug -
>>
>> OK, my mistake. Yes, if those inductors are not tuned properly, the
>> BAND oscillator can be unstable. I must have this project confused

>> with another one, as I thought you had done the alignment.
>>
>> You can do the alignment, you only need the VTVM for oscillating
>> stages, and in the TR-4Cw the Grid of the BAND oscillator is at RF
>> ground so is not confused by loading from any good hi-Z meter.
>>
>> Your measurements are fine, and sounds like you have K2 straightened
>> out. K2 controls the shift of the 9.00 MHz Carrier OSC between CW and
>> SSB so can cause shifting, particularly on SSB.
>>
>> I think the relay work probably took care of the 'drift' on SSB since
>> I assume your 'local' QSOs were done on the lower bands.
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>> What's next??
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
> Garey,
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> Local communications have been on 10M. I lost my 80M dipole several years ago and since I hadn't operated in some time, I haven't installed anything for the lower bands yet.
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> After working on K2, the receive jumping / drifting appears to have stopped. The transmit frequency has been drifting while talking. This was not solved by working on K2. I'm hoping that the alignment of the crystal oscillator has taken care of this but until I can talk to someone on 10M, I cannot verify this.
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> I would like to try to align the rest of the radio but this won't happen until I can acquire the appropriate meter or probe to do so. I will also need some tutoring prior to screwing something up. I didn't know if I could get away with using a 1 meg ohm probe connected to my Fluke to do this satisfactorily or not.
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> After working all the bugs back out of what used to be a smooth operating rig, I would like to remove the old cigarette tar and dust as a final step. I attempted to wipe a portion of it down with a dry cloth but the lettering at the tubes came off. You discussed re-lettering and may just have to clean it with a dry cloth and suffer the consequences.
>
> Thanks,
>
> Doug Coffman
> N9XTF
>
Doug -

The 'slow drifting while talking' may very well have been caused by your fan blowing IN. What that does is force that hot air INTO the radio and around the BAND, CAR OSC and PTO oscillators. ALL oscillators are temperature sensitive to some degree, and blowing hot air on them is a way to do that! Add to that the heat INCREASE when transmitting and it wouldn't be much of a surprise if this was the case. On the other hand, blowing air OUT pulls 'some' room air IN, air that is pretty constant in temperature.

The S-Meter is the only tool you HAVE to have to do alignment. You can use the POWER OUTPUT function for some adjustments, but an external wattmeter is a lot more convenient. 95% of the alignment is adjusting for max (or min) of S-Meter or Output power.

I use GoJo White (non-abrasive) hand cleaner for cigarette smoke removal. I've never had it attack lettering, although that is always a possibility. The tube numbers are easy to replace, either with rub-on lettering or laser printed decal paper.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12707. Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 19:53:44 UTC
From: Terry Cantrell
Topic: 12707 Message: 12707

I have two working calibrators for my Drake 2A. Very simple problem in that I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The trimmer caps are good and as specified as well as tubes that test favorably. Any ideas on what can be done to resolve this problem? Thanks,

73,

Terry W4WTC

[Non-text portions of this message have been removed]

12708. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 20:15:57 UTC
From: Garey Barrell
Topic: 12707 Message: 12708

Terry -

Strange... The only failure I've seen, (once,) was a bad crystal.
Highly unlikely you have TWO bad crystals. From your question I'm
assuming they are 'working', just not on the right frequency?? How far
off are they??

Have youtried them both in both receivers?

Check to see if they're getting correct B+ when the CAL switch is on.
R65 and C70d if low.

Check resistor values.

Bad 100 pF capacitor.

Bad solder (cracked?) on power connector pins.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terry Cantrell wrote:
> I have two working calibrators for my Drake 2A. Very simple problem in that
> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> trimmer caps are good and as specified as well as tubes that test favorably.
> Any ideas on what can be done to resolve this problem? Thanks,
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>
>
> 73,
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>
> Terry W4WTC
>
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12709. Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 20:35:06 UTC
From: mvgilger
Topic: 12686 Message: 12709

Donnie also has the rubber bushings.

http://www.2bradioparts.com/page27.html

Regards,
Mark

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "milton_valerio" <milton_valerio@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, March 20, 2013 8:55 AM
> Subject: [DrakeRadio] Re: rubber bushing on TR4C PTO and
> blue plastic sources??
>
>
> > Thanks a lot guys, I've never heard of these site but
> > certainly he has what I was looking for the rubber sleeve
> > and the blue plastic.
> > 73.
> >
> Lee Lagoon Blue, No.172, is about identical to the
> material used by Drake. Its available at places that sell
> photographic or theatrical lighting. See the Lee web site
> at:
>
> http://leefilters.com/lighting/colour-list.htm
>
> The gel can be cut with scissors and the holes for the
> screws punched with an ordinary paper punch.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

12710. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 20:53:30 UTC
From: Terry Cantrell
Topic: 12707 Message: 12710

Hi Garey:

Actually, I only have the 2A, but the calibrator is the same for both receivers..Unless there is something slightly different about the calibrator circuitry that I'm not aware. The output is strong but I can only adjust the trimmer to within about 10 Khz of the zero beat target which would coincide with the frequency reference standard. I have another 100 Khz crystal but that does not seem to make any difference.they oscillate just fine. Is there anything on the pins that the calibrator plugs into that would cause some sort of frequency shift or adjustment limitation ? The output is clean and stable. A bit of a head scratcher as there is very little to the calibrator to cause a problem. May be as simple as a mislabeled trimmer cap. Before that surgery is attempted, I thought I would ask the experts ! TNX

73

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, March 20, 2013 4:16 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Terry -

Strange... The only failure I've seen, (once,) was a bad crystal. Highly unlikely you have TWO bad crystals. From your question I'm assuming they are 'working', just not on the right frequency?? How far off are they??

Have you tried them both in both receivers?

Check to see if they're getting correct B+ when the CAL switch is on. R65 and C70d if low.

Check resistor values.

Bad 100 pF capacitor.

Bad solder (cracked?) on power connector pins.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

<www.k4oah.com>

Terry Cantrell wrote:
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> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> trimmer caps are good and as specified as well as tubes that test
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> Any ideas on what can be done to resolve this problem? Thanks,
>
>
>
> 73,
>
>
>
> Terry W4WTC
>
>
>
> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

12711. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 21:06:10 UTC
From: Garey Barrell
Topic: 12707 Message: 12711

Terry -

Well, if you believe that the trimmer IS correct (5-80 pF), you might try subbing the 100 pF cap. This cap was 220 pF in the 2-AC for the 2-A.

10 kHz is a LONG way away. Is it too high, or too low? Some of the early 2-ACs also used a 6BA6.

How confident are you in the 'standard' frequency you are using??? I find it HIGHLY suspicious that TWO oscillators are that far off.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Terry Cantrell wrote:
> Hi Garey:
>
>
>
> Actually, I only have the 2A, but the calibrator is the same for both
> receivers..Unless there is something slightly different about the calibrator
> circuitry that I'm not aware. The output is strong but I can only adjust
> the trimmer to within about 10 Khz of the zero beat target which would
> coincide with the frequency reference standard. I have another 100 Khz
> crystal but that does not seem to make any difference.they oscillate just
> fine. Is there anything on the pins that the calibrator plugs into that
> would cause some sort of frequency shift or adjustment limitation ? The
> output is clean and stable. A bit of a head scratcher as there is very
> little to the calibrator to cause a problem. May be as simple as a
> mislabeled trimmer cap. Before that surgery is attempted, I thought I would
> ask the experts ! TNX
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Wednesday, March 20, 2013 4:16 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
>
>
>

>
>
> Terry -
>
> Strange... The only failure I've seen, (once,) was a bad crystal.
> Highly unlikely you have TWO bad crystals. From your question I'm
> assuming they are 'working', just not on the right frequency?? How far
> off are they??
>
> Have you tried them both in both receivers?
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> Check to see if they're getting correct B+ when the CAL switch is on.
> R65 and C70d if low.
>
> Check resistor values.
>
> Bad 100 pF capacitor.
>
> Bad solder (cracked?) on power connector pins.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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>
> Terry Cantrell wrote:
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> that
>> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
>> trimmer caps are good and as specified as well as tubes that test
> favorably.
>> Any ideas on what can be done to resolve this problem? Thanks,
>>
>> 73,
>>
>> Terry W4WTC
>>
>>

12712. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 21:40:23 UTC
From: Terry Cantrell
Topic: 12707 Message: 12712

Hi Garey:

The frequency references are not the problem. I have two synthesized signal generators with recent lab calibrations so I know they are dead nuts on as well as the ability to receive WWV in the receiver itself. The calibrator is on the low side. at any frequency and falling exactly on the 100 Kc points.oops.100 Khz.sorry I'm showing my age. I'll try some substitutions again and see if I missed something. You are correct. the trimmer is shown to be 5-80 pF.

73,

TC

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, March 20, 2013 5:06 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Terry -

Well, if you believe that the trimmer IS correct (5-80 pF), you might try subbing the 100 pF cap. This cap was 220 pF in the 2-AC for the 2-A.

10 kHz is a LONG way away. Is it too high, or too low? Some of the early 2-ACs also used a 6BA6.

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73, Garey - K4OAH
Glen Allen, VA

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<www.k4oah.com>

Terry Cantrell wrote:
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> crystal but that does not seem to make any difference.they oscillate just
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> ask the experts ! TNX
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>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
> Behalf Of Garey Barrell
> Sent: Wednesday, March 20, 2013 4:16 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
>
>
>
>
>
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> Glen Allen, VA
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> favorably.
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>> 73,
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>> Terry W4WTC
>>
>>

[Non-text portions of this message have been removed]

12713. R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 21:42:07 UTC
From: Al
Topic: 12713 Message: 12713

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat.
I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

12714. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 22:10:49 UTC
From: Wes Bolin
Topic: 12713 Message: 12714

I had alligator clip recommended to me. Thats what I used on my 2B.
Wes

From: Al <aschichler@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, March 20, 2013 4:42 PM
Subject: [DrakeRadio] R-4A Passband tuner slugs

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat.
I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12715. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 22:43:40 UTC
From: Paul Kraemer
Topic: 12707 Message: 12715

May be totally off the wall but I had a soldered in crystal that refused to be where it was supposed to be. After a lot of futile parts changing I ended up soldering the old crystal back and it was correct.
A buddy said the heat could have caused it to come around. Something grows on crystal?
Don't know if there is any basis for his claim, but it has been working correct for several years now.
No, it wasn't bad solder joint or broken pcb. Just spooky.
Paul K0UYA

----- Original Message -----
From: "Terry Cantrell" <tcantrel@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 20, 2013 2:53 PM
Subject: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

>I have two working calibrators for my Drake 2A. Very simple problem in
>that
> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> trimmer caps are good and as specified as well as tubes that test
> favorably.
> Any ideas on what can be done to resolve this problem? Thanks,
>
>
>
> 73,
>
>
>
> Terry W4WTC
>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12716. Re: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-20 23:58:06 UTC
From: Steve Wedge
Topic: 12686 Message: 12716

I like to burn the holes in with my Weller

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Wednesday, March 20, 2013 3:31 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

----- Original Message -----
From: "milton_valerio" <milton_valerio@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 20, 2013 8:55 AM
Subject: [DrakeRadio] Re: rubber bushing on TR4C PTO and
blue plastic sources??

> Thanks a lot guys, I've never heard of these site but
> certainly he has what I was looking for the rubber sleeve
> and the blue plastic.
> 73.
>
Lee Lagoon Blue, No.172, is about identical to the
material used by Drake. Its available at places that sell
photographic or theatrical lighting. See the Lee web site
at:

http://leefilters.com/lighting/colour-list.htm

The gel can be cut with scissors and the holes for the
screws punched with an ordinary paper punch.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

12717. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 00:02:13 UTC
From: Steve Wedge
Topic: 12713 Message: 12717

I use a standard recessed flat blade technician's adjustment tool (known in its day as a "tweaker"). The blue Bournes PCB pot adjusters will serve the same purpose and make it MUCH easier than grabbing it with pliers!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al
Sent: Wednesday, March 20, 2013 5:42 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] R-4A Passband tuner slugs

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat.
I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

[Non-text portions of this message have been removed]

12718. Re: [DrakeRadio] Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 00:13:52 UTC
From: Jim Shorney
Topic: 12686 Message: 12718

If you go to this page:

http://radiojim.exofire.net/pages/blue.html

The background color is rendered from the RGB color code from the Lagoon Blue sample on Lee's web site. About halfway down the page, there is a sligthly different color blue box that is a sample of Rosco E-Color #172 Lagoon Blue. There are also links to the Rosco and Lee web sites.

Lee gels can also be purchased from eBay sellers, I got a good sized chunk of 172 for under 10 bucks.

73

-Jim
NU0C

On Wed, 20 Mar 2013 19:58:06 -0400, Steve Wedge wrote:

>Lee Lagoon Blue, No.172, is about identical to the
>material used by Drake.

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12719. Re: rubber bushing on TR4C PTO and blue plastic sources??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 00:28:34 UTC
From: milton_valerio
Topic: 12686 Message: 12719

Hmmmm, the #172 looks quite green to me....

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "milton_valerio" <milton_valerio@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, March 20, 2013 8:55 AM
> Subject: [DrakeRadio] Re: rubber bushing on TR4C PTO and
> blue plastic sources??
>
>
> > Thanks a lot guys, I've never heard of these site but
> > certainly he has what I was looking for the rubber sleeve
> > and the blue plastic.
> > 73.
> >
> Lee Lagoon Blue, No.172, is about identical to the
> material used by Drake. Its available at places that sell
> photographic or theatrical lighting. See the Lee web site
> at:
>
> http://leefilters.com/lighting/colour-list.htm
>
> The gel can be cut with scissors and the holes for the
> screws punched with an ordinary paper punch.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

12720. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 00:31:42 UTC
From: Terry Cantrell
Topic: 12707 Message: 12720

Thanks Paul. Let you know how this eventually works out. Could be a bad rock..

73,

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Paul Kraemer
Sent: Wednesday, March 20, 2013 6:44 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

May be totally off the wall but I had a soldered in crystal that refused to be where it was supposed to be. After a lot of futile parts changing I ended

up soldering the old crystal back and it was correct.
A buddy said the heat could have caused it to come around. Something grows on crystal?
Don't know if there is any basis for his claim, but it has been working correct for several years now.
No, it wasn't bad solder joint or broken pcb. Just spooky.
Paul K0UYA

----- Original Message -----
From: "Terry Cantrell" <tcantrel@...
<mailto:tcantrel%40bellsouth.net> >
To: <DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Wednesday, March 20, 2013 2:53 PM
Subject: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

>I have two working calibrators for my Drake 2A. Very simple problem in
>that
> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> trimmer caps are good and as specified as well as tubes that test
> favorably.
> Any ideas on what can be done to resolve this problem? Thanks,
>
>
>
> 73,
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>
> Terry W4WTC
>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12721. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 00:35:58 UTC
From: Richard Knoppow
Topic: 12713 Message: 12721

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 20, 2013 5:02 PM
Subject: Re: [DrakeRadio] R-4A Passband tuner slugs

>I use a standard recessed flat blade technician's
>adjustment tool (known in its day as a "tweaker"). The
>blue Bournes PCB pot adjusters will serve the same purpose
>and make it MUCH easier than grabbing it with pliers!
>
> Steve Wedge, W1ES/4

I may be the one who recommended an alligator clip.
I've tried the adjustment tools of the sort you use and
found they tended to stick to the adjuster causing backlash.
These little tools were sold with many names on them,
Bourns, Spectrol, etc, all makers of small, ten or twenty
turn pots. The advantage of the alligator clip is that when
you let it go the adjustment does not move. I wonder what
was used at the factory, there may have been a special tool
made just for these cores. They can be very frustrating to
adjust.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12722. Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:07:03 UTC
From: Rich Arland
Topic: 12722 Message: 12722

I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.

Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!

My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.

Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.

So, anyone on these lists have any experience/background doing somethng similar to this??

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

[Non-text portions of this message have been removed]

12723. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:13:10 UTC
From: vacuuminded2@...
Topic: 12722 Message: 12723

Older versions of photoshop had a "stitch" feature which would do just that- probably designed to take multiple photos taken on the same plane and turn them into a panoramic image. Worked slicker than snot for schematics. If you have an older version (sorry I don't recall what mine was anymore) you might look around and see if you get lucky.
For some reason, in their infinite wisdom, they removed it from newer versions. I would also be very interested to hear what is currently available that offers a similar feature.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Mar 20, 2013, at 8:07 PM, Rich Arland <k7sz@...> wrote:

> I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.
>
> Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!
>
> My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.
>
> Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.
>
> So, anyone on these lists have any experience/background doing somethng similar to this??
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> ("RED Noogie" Guru)
>
>
> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12724. Re: [Heathkit:Yahoo] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:13:55 UTC
From: Jim Larsen
Topic: 12722 Message: 12724

Why, Rich, I thought you knew everything. ;-)

I am going to have to move you off the pedestal that I had you on all
these years. What a shame. :-)

Take care.

Jim

Jim Larsen, AL7FS
Anchorage Alaska
907-345-3190
http://www.AL7FS.us/

On 3/20/2013 5:07 PM, Rich Arland wrote:
> I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.
>
> Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!
>
> My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.
>
> Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.
>
> So, anyone on these lists have any experience/background doing somethng similar to this??
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> ("RED Noogie" Guru)
>
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> [Non-text portions of this message have been removed]
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> --
> GROUP STATEMENT: Heathkit@yahoogroups.com purpose is to promote Heathkit
> discussions, as well as selling/buying Heathkit items and parts, and
> providing answers to questions relating to problems and maintenance of
> equipment. All Heathkit items(Ham/Test/Audio/RC/Automotive/Computers,etc.)
> are welcome subjects.
> MEMBERSHIP: 2648 members (as of 02/16/13), with a few ex-heath employees).
> NOTE: Pictures and attachments to e-mail are not permitted due to possible
> virus's, so please post them to a website OR to the groups 'files'
> section for them to download OR send them direct to the group member.
> NOTE 2: All auction items EBAY etc., are always WELCOME to be advertised.
>
>
>

12725. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:20:36 UTC
From: Garey Barrell
Topic: 12713 Message: 12725

There is a standard TV tuning tool that I believe was for Zenith TVs.... They had adjusters with a tip shaped like aspade lug, smaller of course, and the tool had a flat end with a rectangular hole in it. The other end is a flat screwdriver, a small piece of metal forced into the end of the tool.

I have a little yellow one by GC.

I just posted two photos in the Photo section. The same tool is also available in 'stick' type as I described above, usually with another format on the other end.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12726. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:23:59 UTC
From: vacuuminded2@...
Topic: 12707 Message: 12726

Certainly is odd.
Do you have too little C or the trimmer is running out at max C? Might try just adding a ceramic or mica cap (say 50 or 100pf) in parallel to the trimmer and see if the rock will "pull" that far and still resonate reliably upon command.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Mar 20, 2013, at 4:40 PM, "Terry Cantrell" <tcantrel@...> wrote:

> Hi Garey:
>
> The frequency references are not the problem. I have two synthesized signal
> generators with recent lab calibrations so I know they are dead nuts on as
> well as the ability to receive WWV in the receiver itself. The calibrator
> is on the low side. at any frequency and falling exactly on the 100 Kc
> points.oops.100 Khz.sorry I'm showing my age. I'll try some substitutions
> again and see if I missed something. You are correct. the trimmer is shown
> to be 5-80 pF.
>
> 73,
>
> TC
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Wednesday, March 20, 2013 5:06 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
>
> Terry -
>
> Well, if you believe that the trimmer IS correct (5-80 pF), you might
> try subbing the 100 pF cap. This cap was 220 pF in the 2-AC for the 2-A.
>
> 10 kHz is a LONG way away. Is it too high, or too low? Some of the
> early 2-ACs also used a 6BA6.
>
> How confident are you in the 'standard' frequency you are using??? I
> find it HIGHLY suspicious that TWO oscillators are that far off.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Terry Cantrell wrote:
> > Hi Garey:
> > >
> > >
> > >
> > > Actually, I only have the 2A, but the calibrator is the same for both
> > > receivers..Unless there is something slightly different about the
> calibrator
> > > circuitry that I'm not aware. The output is strong but I can only adjust
> > > the trimmer to within about 10 Khz of the zero beat target which would
> > > coincide with the frequency reference standard. I have another 100 Khz
> > > crystal but that does not seem to make any difference.they oscillate just
> > > fine. Is there anything on the pins that the calibrator plugs into that
> > > would cause some sort of frequency shift or adjustment limitation ? The
> > > output is clean and stable. A bit of a head scratcher as there is very
> > > little to the calibrator to cause a problem. May be as simple as a
> > > mislabeled trimmer cap. Before that surgery is attempted, I thought I
> would
> > > ask the experts ! TNX
> > >
> > >
> > >
> > > From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
> On
> > > Behalf Of Garey Barrell
> > > Sent: Wednesday, March 20, 2013 4:16 PM
> > > To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> > > Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
> > >
> > >
> > >
> > >
> > >
> > > Terry -
> > >
> > > Strange... The only failure I've seen, (once,) was a bad crystal.
> > > Highly unlikely you have TWO bad crystals. From your question I'm
> > > assuming they are 'working', just not on the right frequency?? How far
> > > off are they??
> > >
> > > Have you tried them both in both receivers?
> > >
> > > Check to see if they're getting correct B+ when the CAL switch is on.
> > > R65 and C70d if low.
> > >

> > Check resistor values.
> >
> > Bad 100 pF capacitor.
> >
> > Bad solder (cracked?) on power connector pins.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> >
> > Terry Cantrell wrote:
> >> I have two working calibrators for my Drake 2A. Very simple problem in
> > that
> >> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> >> trimmer caps are good and as specified as well as tubes that test
> > favorably.
> >> Any ideas on what can be done to resolve this problem? Thanks,
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> >> 73,
> >>
> >> Terry W4WTC
> >>
> >>
>
> [Non-text portions of this message have been removed]
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>

[Non-text portions of this message have been removed]

12727. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:25:41 UTC
From: vacuuminded2@...
Topic: 12707 Message: 12727

Or in series with the trimmer, if there is already too much C.
Chris

Sent from my outdated iPhone wireless thingy

On Mar 20, 2013, at 8:23 PM, vacuuminded2@... wrote:

> Certainly is odd.
> Do you have too little C or the trimmer is running out at max C? Might try just adding a ceramic or mica cap (say 50 or 100pf) in parallel to the trimmer and see if the rock will "pull" that far and still resonate reliably upon command.
>
> Regards,
> Chris
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> Sent from my outdated iPhone wireless thingy
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> On Mar 20, 2013, at 4:40 PM, "Terry Cantrell" <tcantrel@...> wrote:
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> > Hi Garey:
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> > generators with recent lab calibrations so I know they are dead nuts on as
> > well as the ability to receive WWV in the receiver itself. The calibrator
> > is on the low side. at any frequency and falling exactly on the 100 Kc
> > points.oops.100 Khz.sorry I'm showing my age. I'll try some substitutions
> > again and see if I missed something. You are correct. the trimmer is shown
> > to be 5-80 pF.
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> > 73,
> >
> > TC
> >
> > From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> > Behalf Of Garey Barrell
> > Sent: Wednesday, March 20, 2013 5:06 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
> >
> > Terry -
> >
> > Well, if you believe that the trimmer IS correct (5-80 pF), you might
> > try subbing the 100 pF cap. This cap was 220 pF in the 2-AC for the 2-A.
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> > 10 kHz is a LONG way away. Is it too high, or too low? Some of the
> > early 2-ACs also used a 6BA6.

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> > How confident are you in the 'standard' frequency you are using??? I
> > find it HIGHLY suspicious that TWO oscillators are that far off.
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> > 73, Garey - K4OAH
> > Glen Allen, VA
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> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
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> > Terry Cantrell wrote:
> > > Hi Garey:
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> > >
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> > > Actually, I only have the 2A, but the calibrator is the same for both
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> > > would cause some sort of frequency shift or adjustment limitation ? The
> > > output is clean and stable. A bit of a head scratcher as there is very
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> > > mislabeled trimmer cap. Before that surgery is attempted, I thought I
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> > > ask the experts ! TNX
> > >
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> > >
> > > From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> > [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
> > On
> > > Behalf Of Garey Barrell
> > > Sent: Wednesday, March 20, 2013 4:16 PM
> > > To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> > > Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
> > >
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> > > Terry -
> > >
> > > Strange... The only failure I've seen, (once,) was a bad crystal.
> > > Highly unlikely you have TWO bad crystals. From your question I'm
> > > assuming they are 'working', just not on the right frequency?? How far

> > > off are they??
> > >
> > > Have you tried them both in both receivers?
> > >
> > > Check to see if they're getting correct B+ when the CAL switch is on.
> > > R65 and C70d if low.
> > >
> > > Check resistor values.
> > >
> > > Bad 100 pF capacitor.
> > >
> > > Bad solder (cracked?) on power connector pins.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > >
> > > Terry Cantrell wrote:
> > >> I have two working calibrators for my Drake 2A. Very simple problem in
> > > that
> > >> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> > >> trimmer caps are good and as specified as well as tubes that test
> > > favorably.
> > >> Any ideas on what can be done to resolve this problem? Thanks,
> > >>
> > >> 73,
> > >>
> > >> Terry W4WTC
> > >>
> > >>
> >
> > [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

12728. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:25:49 UTC
From: Garey Barrell
Topic: 12722 Message: 12728

Rich -

That's how I domy Drake (and other) schematics. I use an old Photoshop Elements (the beginners photoshop). Scan in however many sections it takes, with overlap, and thenstick them together.

If you can make good 600 dpi scans (flat on the glass, no curves or shadows) and email, I can pastethem together for you. Split them up and include an inch or so overlap.

The ones on my CDs can be blown up to 4' x 3' printed at a FedEx Office with a large format printer.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Rich Arland wrote:
> I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.
>
> Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!
>
> My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.
>
> Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.
>
> So, anyone on these lists have any experience/background doing somethng similar to this??
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> ("RED Noogie" Guru)
>
>

12729. Re: [DrakeRadio] Bringing my TR-4 back to life... final problem list

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-19 01:11:17 UTC
From: Steve Wedge
Topic: 12677 Message: 12729

The muting may be a sticky relay or a VOX issue. How's V19?

I want to go with a leaky electrolytic cap for the "pulse" noise. It could be discharging across a defect internally and the noise afterwards could be "ringing". Unfortunately, the only way to confirm that involves disconnecting the originals and subbing in new ones. If your AC-4 is working fine with your other radios, look at C145 in the TR-4. It's a two-section can that's connected to the +150 and +245V supplies.

I've gone through the s-meter zeroing issues quite a bit. Although bad/gassy tubes in the AGC circuit can be to blame, don't discount a bad RF amp tube. I've replaced more than a few 6BZ6's lately that have been the cause of s-meter problems in the receivers. In the TR-4, however, the RF amp is a 12BA6. I'd check it anyway (V14), since you can swap it with V12 if you don't have any spares and see if anything changes.

Audio feedback could be due to RF getting into the audio. How's your grounding?

Good luck, Mark...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mark Pilant
Sent: Monday, March 18, 2013 8:22 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Bringing my TR-4 back to life... final problem list

While my TR-4 is now usable, there are still some remaining minor
problems to be addressed:
o Sometimes, when switching from X-CW to SSB after tuning
up, the receiver is still muted. However, switching back
to X-CW and then to SSB again seems to "fix" the problem.
o While listing on the 10m net Sunday, I was hearing almost
a low frequency "pulse" type noise. I'd put it about 10
to 20 Hz. It was not AC hum. It is less on the lower
frequency bands, but still there. It is also more
pronounced the higher the audio gain.
o The S-Meter zeroing doesn't seem to "hold". When switching
around the bands, the zeroing of the S-Meter will have to
adjusted. BTW, I'll switch over to my dummy load before
adjusting just to eliminate as many spurious signals as
possible.
o There seems to be some audio "bleed-through" in my head
phones when transmitting. (I'm using Kenwood HS-5 head
phones.) When I transmit, I can definitely hear my audio

in my ears.

All of these need to be fixed, but as I said, the rig is usable
and it does transmit and receive well.

My first step is going to be to check through the archives to see
if others have reported the same problems.

Now I need to rebuild my AC-3 and attend to my ailing TR-3 :-P

73

- Mark N1VQW

[Non-text portions of this message have been removed]

12730. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:45:35 UTC
From: Barry
Topic: 12722 Message: 12730

I've done that as simply as pasting each piece of the schematic into Microsoft Paint or PowerPoint. In Paint, you can erase bad areas, replace text, and other small corrections. It's crude, but it does work.

Regards,
Barry - N4BUQ

> I'm hitting up all three of my "boatanchor-type" lists in hopes
> someone has already done what I need to do and I won't have to
> reinvent the wheel.
>
> Schematic diagrams: How does one take a small, in some cases a couple
> of pages out of a manual, enlarge them and put them together to
> obtain one, large schematic with no seams that and old phart (like
> me) can actually read!
>
> My first thought was to hit Stapes or Office Max and have them take
> the two piece schematic from the HQ-110 and make a larger version.
>
> Then I thought about a photo program like PhotoShop, Elements, NX-2,
> etc.
>
> So, anyone on these lists have any experience/background doing
> somethng similar to this??
>
>
> Rich Arland, K7SZ
> Dacula, GA

12731. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:51:49 UTC
From: Terry Cantrell
Topic: 12707 Message: 12731

Thanks Chris….agreed, almost has to be a “C” issue. Time to tinker a bit !

73,

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of vacuuminded2@...
Sent: Wednesday, March 20, 2013 9:26 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Or in series with the trimmer, if there is already too much C.
Chris

Sent from my outdated iPhone wireless thingy

On Mar 20, 2013, at 8:23 PM, vacuuminded2@... <mailto:vacuuminded2%40yahoo.com> wrote:

> Certainly is odd.
> Do you have too little C or the trimmer is running out at max C? Might try just adding a ceramic or mica cap (say 50 or 100pf) in parallel to the trimmer and see if the rock will "pull" that far and still resonate reliably upon command.
>
> Regards,
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On Mar 20, 2013, at 4:40 PM, "Terry Cantrell" <tcantrel@... <mailto:tcantrel%40bellsouth.net> > wrote:
>
> > Hi Garey:
> >
> > The frequency references are not the problem. I have two synthesized signal
> > generators with recent lab calibrations so I know they are dead nuts on as
> > well as the ability to receive WWV in the receiver itself. The calibrator
> > is on the low side. at any frequency and falling exactly on the 100 Kc
> > points.oops.100 Khz.sorry I'm showing my age. I'll try some substitutions
> > again and see if I missed something. You are correct. the trimmer is shown
> > to be 5-80 pF.
> >
> > 73,
> >
> > TC
> >
> > From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>

[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On
> > Behalf Of Garey Barrell
> > Sent: Wednesday, March 20, 2013 5:06 PM
> > To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> > Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
> >
> > Terry -
> >
> > Well, if you believe that the trimmer IS correct (5-80 pF), you might
> > try subbing the 100 pF cap. This cap was 220 pF in the 2-AC for the 2-A.
> >
> > 10 kHz is a LONG way away. Is it too high, or too low? Some of the
> > early 2-ACs also used a 6BA6.
> >
> > How confident are you in the 'standard' frequency you are using??? I
> > find it HIGHLY suspicious that TWO oscillators are that far off.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Terry Cantrell wrote:
> > > Hi Garey:
> > >
> > >
> > >
> > > Actually, I only have the 2A, but the calibrator is the same for both
> > > receivers..Unless there is something slightly different about the
> > calibrator
> > > circuitry that I'm not aware. The output is strong but I can only adjust
> > > the trimmer to within about 10 Khz of the zero beat target which would
> > > coincide with the frequency reference standard. I have another 100 Khz
> > > crystal but that does not seem to make any difference.they oscillate just
> > > fine. Is there anything on the pins that the calibrator plugs into that
> > > would cause some sort of frequency shift or adjustment limitation ? The
> > > output is clean and stable. A bit of a head scratcher as there is very
> > > little to the calibrator to cause a problem. May be as simple as a
> > > mislabeled trimmer cap. Before that surgery is attempted, I thought I
> > would
> > > ask the experts ! TNX
> > >
> > >
> > >
> > > From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
> > [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>]
> > On

> > > Behalf Of Garey Barrell
> > > Sent: Wednesday, March 20, 2013 4:16 PM
> > > To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
> > > Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
> > >
> > >
> > >
> > >
> > >
> > > Terry -
> > >
> > > Strange... The only failure I've seen, (once,) was a bad crystal.
> > > Highly unlikely you have TWO bad crystals. From your question I'm
> > > assuming they are 'working', just not on the right frequency?? How far
> > > off are they??
> > >
> > > Have you tried them both in both receivers?
> > >
> > > Check to see if they're getting correct B+ when the CAL switch is on.
> > > R65 and C70d if low.
> > >
> > > Check resistor values.
> > >
> > > Bad 100 pF capacitor.
> > >
> > > Bad solder (cracked?) on power connector pins.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > >
> > > Terry Cantrell wrote:
> > >> I have two working calibrators for my Drake 2A. Very simple problem in
> > > that
> > >> I cannot zero beat either of these to the 10 0r 15 Mhz WWV reference. The
> > >> trimmer caps are good and as specified as well as tubes that test
> > > favorably.
> > >> Any ideas on what can be done to resolve this problem? Thanks,
> > >>
> > >> 73,
> > >>
> > >> Terry W4WTC
> > >>
> > >>
> > >
> > > [Non-text portions of this message have been removed]
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12732. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:55:03 UTC
From: Garey Barrell
Topic: 12707 Message: 12732

Don't forget the 'other half' of the capacitive voltage divider network. Either a 100 or 220 pF cap depending upon age. Use a good Dur-Mica or other NP0 type cap.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12733. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 01:57:36 UTC
From: Steve Wedge
Topic: 12713 Message: 12733

I've developed a "touch" for getting them adjusted. I also use a scope on the TP2 connection and adjust for lowest negative on each one. I go round twice to make sure they're all "in".

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Wednesday, March 20, 2013 8:35 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4A Passband tuner slugs

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, March 20, 2013 5:02 PM
Subject: Re: [DrakeRadio] R-4A Passband tuner slugs

>I use a standard recessed flat blade technician's
>adjustment tool (known in its day as a "tweaker"). The
>blue Bournes PCB pot adjusters will serve the same purpose
>and make it MUCH easier than grabbing it with pliers!
>
> Steve Wedge, W1ES/4

I may be the one who recommended an alligator clip.
I've tried the adjustment tools of the sort you use and
found they tended to stick to the adjuster causing backlash.
These little tools were sold with many names on them,
Bourns, Spectrol, etc, all makers of small, ten or twenty
turn pots. The advantage of the alligator clip is that when
you let it go the adjustment does not move. I wonder what
was used at the factory, there may have been a special tool
made just for these cores. They can be very frustrating to
adjust.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

12734. RE: [DrakeRadio] Re: [Heathkit:Yahoo] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 02:03:46 UTC
From: Rich Arland
Topic: 12722 Message: 12734

James....

All that fresh air and pine tree scent must be having an affect on your judgement.

I DO know everything, but once in a while I must descend from Olympus and challenge the Great Unwashed!!!

How you doin', Pard? Going to Daytong this year? Good FDIM presentations on the books.

Vy 73

(Oh, that "Olympus" thing...in reality all I do up there is get coffee for The Gods!)

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: k7sz@...
CC: drakeradio@yahoogroups.com
From: jimlarsen2002@...
Date: Wed, 20 Mar 2013 17:13:55 -0800
Subject: [DrakeRadio] Re: [Heathkit:Yahoo] Schematic Help

Why, Rich, I thought you knew everything. ;-)

I am going to have to move you off the pedestal that I had you on all

these years. What a shame. :-)

Take care.

Jim

Jim Larsen, AL7FS

Anchorage Alaska

907-345-3190

http://www.AL7FS.us/

On 3/20/2013 5:07 PM, Rich Arland wrote:

> I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.

>

> Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!

>

> My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.

>

> Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.

>

> So, anyone on these lists have any experience/background doing somethng similar to this??

>

>

> Rich Arland, K7SZ

> Dacula, GA

>

> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

>

> BLOG: http://commobunker.blogspot.com/

>

> ("RED Noogie" Guru)

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> [Non-text portions of this message have been removed]

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> --

> GROUP STATEMENT: Heathkit@yahoogroups.com purpose is to promote Heathkit

> discussions, as well as selling/buying Heathkit items and parts, and

> providing answers to questions relating to problems and maintenance of

> equipment. All Heathkit items(Ham/Test/Audio/RC/Automotive/Computers,etc.)

> are welcome subjects.

> MEMBERSHIP: 2648 members (as of 02/16/13), with a few ex-heath employees).

> NOTE: Pictures and attachments to e-mail are not permitted due to possible

> virus's, so please post them to a website OR to the groups 'files'

> section for them to download OR send them direct to the group member.

> NOTE 2: All auction items EBAY etc., are always WELCOME to be advertised.

>

>

>

[Non-text portions of this message have been removed]

12735. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 02:07:41 UTC
From: Ethan Blanton
Topic: 12722 Message: 12735

Rich Arland spake unto us the following wisdom:
> Schematic diagrams: How does one take a small, in some cases a couple
> of pages out of a manual, enlarge them and put them together to obtain
> one, large schematic with no seams that and old phart (like me) can
> actually read!

You may find the open source software package 'Hugin' useful:

http://hugin.sourceforge.net/download/

It's intended for panoramic photographs, but I suspect it will work
quite well for high-contrast images such as schematics. You may have
to set some control points manually. Simply take high resolution
scans of the schematics you want to use, stitch them with Hugin, then
take them to a copy shop and have them put on a tabloid size page!
:-)

Ethan

12736. Re: Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 02:35:24 UTC
From: toptyp19
Topic: 12722 Message: 12736

Rich-

Garey had a good offer. If it doesn't pan out I just asked my xyl what she could do. She has 40+ years in typesetting and graphic arts. Yes, back when output was on paper tape! (Think Florida, chad, Jud Bush, vote tampering, etc.) If you can provide hi-res .pdfs she is willing give it a go. Knew I married the right gal!

73, Joe-WA9LAE.

--- In DrakeRadio@yahoogroups.com, Rich Arland <k7sz@...> wrote:
>
> I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.
>
> Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!
>
> My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.
>
> Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.
>
> So, anyone on these lists have any experience/background doing somethng similar to this??
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> ("RED Noogie" Guru)
>
>
> [Non-text portions of this message have been removed]
>

12737. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 03:35:59 UTC
From: Terry Cantrell
Topic: 12707 Message: 12737

Problem solved. The newer 2 AC Calibrator came with a new crystal and a 6CB6A tube. The original schematic calls for a 6BZ6 which I substituted and that solved the issue with the trimmer. Not sure if the 6CB6A is supposed to be an acceptable substitution but in this case it seems to directly affect the adjustment range of the trimmer. Thanks as always to the Drake group and in particularly, Garey, for all the support that is given. It’s appreciated !

73,

Terry W4WTC

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, March 20, 2013 9:55 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Don't forget the 'other half' of the capacitive voltage divider
network. Either a 100 or 220 pF cap depending upon age. Use a good
Dur-Mica or other NP0 type cap.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

12738. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 14:43:45 UTC
From: Garey Barrell
Topic: 12707 Message: 12738

Terry -

I never seem to go far enough back, assuming too much!! Yes, the wrong tube 'could' be the cause...! :-)

Looks like it 'oughta' work, same base, same intended function (B&W TV IF), even very close to the same inter-element capacitances. So don't know 'why' it didn't work, but I might have tried the same tube if I didn't have a 6BZ6 or 6BA6.

Fixed anyway!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terry Cantrell wrote:
> Problem solved. The newer 2 AC Calibrator came with a new crystal and a 6CB6A tube. The original schematic calls for a 6BZ6 which I substituted and that solved the issue with the trimmer. Not sure if the 6CB6A is supposed to be an acceptable substitution but in this case it seems to directly affect the adjustment range of the trimmer. Thanks as always to the Drake group and in particularly, Garey, for all the support that is given. It’s appreciated !
>
>
>
> 73,
>
>
>
>
>
> Terry W4WTC
>
>

12739. RE: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 15:23:37 UTC
From: Terrell Hamilton
Topic: 12713 Message: 12739

Would a piece of flexible tubing over the end of the slug work? I don't remember what it looks like, but if it will fit through the adjustment holes, it might be worth trying.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Wednesday, March 20, 2013 5:02 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4A Passband tuner slugs

I use a standard recessed flat blade technician's adjustment tool (known in its day as a "tweaker"). The blue Bournes PCB pot adjusters will serve the same purpose and make it MUCH easier than grabbing it with pliers!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al
Sent: Wednesday, March 20, 2013 5:42 PM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: [DrakeRadio] R-4A Passband tuner slugs

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat.
I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12740. RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 15:23:52 UTC
From: Terry Cantrell
Topic: 12707 Message: 12740

Hi Garey:

One other point, and it may not be much of a problem, is that anyone who purchases the aftermarket replacement 2-AC calibrators will find they usually come with 6CB6A tubes. That tube works fine for signal generation but there must be slight differences in inter-electrode capacitances that may be the cause and limiting factors on the trimmer adjustment/interaction with the tube. I cannot find in any cross-references I've checked that the 6CB6A is a direct substitute for the 6BZ6. In my 2-A it made a significant difference.

73,

Terry W4WTC

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Thursday, March 21, 2013 10:44 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Terry -

I never seem to go far enough back, assuming too much!! Yes, the
wrong tube 'could' be the cause...! :-)

Looks like it 'oughta' work, same base, same intended function (B&W TV
IF), even very close to the same inter-element capacitances. So don't
know 'why' it didn't work, but I might have tried the same tube if I
didn't have a 6BZ6 or 6BA6.

Fixed anyway!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terry Cantrell wrote:
> Problem solved. The newer 2 AC Calibrator came with a new crystal and a 6CB6A tube. The original schematic calls for a 6BZ6 which I substituted and that solved the issue with the trimmer. Not sure if the 6CB6A is supposed to be an acceptable substitution but in this case it seems to directly affect the adjustment range of the trimmer. Thanks as always to the Drake group and in particularly, Garey, for all the support that is given. It's appreciated !
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> 73,
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> Terry W4WTC
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[Non-text portions of this message have been removed]

12741. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 15:47:33 UTC
From: Ken Winterling
Topic: 12713 Message: 12741

I haven't had an A or B line on the bench in a long time but I know I have
an adjustment tool that fits. Before I got one I believe I used a piece
of brass tubing squeezed to fit. I don't recall the size of the adjuster
tip from memory so I don't know if a ball point pen refill is big enough
but you get the idea. You need something the fits securely but does not
"grab" as that "bumps" the adjustment when removing the tool.

Ken
WA2LBI

On Thu, Mar 21, 2013 at 11:23 AM, Terrell Hamilton <hamilter@...> wrote:

> Would a piece of flexible tubing over the end of the slug work? I don't
> remember what it looks like, but if it will fit through the adjustment
> holes, it might be worth trying.
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>
> Terry K7WLD
>
> Wenatchee, WA
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> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Steve Wedge
> Sent: Wednesday, March 20, 2013 5:02 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4A Passband tuner slugs
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>
> I use a standard recessed flat blade technician's adjustment tool (known in
> its day as a "tweaker"). The blue Bournes PCB pot adjusters will serve the
> same purpose and make it MUCH easier than grabbing it with pliers!
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
> From: Al

> Sent: Wednesday, March 20, 2013 5:42 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: [DrakeRadio] R-4A Passband tuner slugs
>
> I'm sure this subject has been brought up before, but I can't really find a
> lot of information about it.
> In the manual where it tells you to set the passband selector to .4 and the
> tuning knob to the center of the shortest line, and then adjust the four
> slugs on the rear of the passband tuner for max AVC voltage, it doesn't say
> what kind of tool to use. I think I got it pretty close by using a
> long-nose
> pliers, but it was very tedious, and I'm not sure I got them all adjusted
> dead-on.
> I don't see any slots for an alignment tool, and the ends of the slugs that
> stick out of the holes are kind of pointy but maybe a little bit flat.
> I couldn't find anything that would work at all except a pliers. It seems
> like there must be a better way to adjust those things. (maybe not)
>
> Thanks for any advice,
> Al, WA2S
>
>

[Non-text portions of this message have been removed]

12742. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 15:50:32 UTC
From: Garey Barrell
Topic: 12707 Message: 12742

Terry -

Interestingly, the only inter-electrode capacitances is that the BZ is 7 pF 'Grid to everything' and the CB is 6.5 pF! Everything else is identical. Even the 'gain' (8000 umhos) is identical. The only difference I see between the two is the BZ is a SemiRemote cutoff and the CB is a Sharp cutoff. I don't see how that would affect the frequency, but ....

Anyway, we know the 'right' tube DOES work. If you have a 6BA6, try it. It has far more differences than the CB......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terry Cantrell wrote:
> Hi Garey:
>
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>
> One other point, and it may not be much of a problem, is that anyone who purchases the aftermarket replacement 2-AC calibrators will find they usually come with 6CB6A tubes. That tube works fine for signal generation but there must be slight differences in inter-electrode capacitances that may be the cause and limiting factors on the trimmer adjustment/interaction with the tube. I cannot find in any cross-references I've checked that the 6CB6A is a direct substitute for the 6BZ6. In my 2-A it made a significant difference.
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> Sent: Thursday, March 21, 2013 10:44 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B
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> I never seem to go far enough back, assuming too much!! Yes, the
> wrong tube 'could' be the cause...! :-)
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> Looks like it 'oughta' work, same base, same intended function (B&W TV
> IF), even very close to the same inter-element capacitances. So don't
> know 'why' it didn't work, but I might have tried the same tube if I
> didn't have a 6BZ6 or 6BA6.
>
> Fixed anyway!!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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>
> Terry Cantrell wrote:
>> Problem solved. The newer 2 AC Calibrator came with a new crystal and a 6CB6A tube. The original schematic calls for a 6BZ6 which I substituted and that solved the issue with the trimmer. Not sure if the 6CB6A is supposed to be an acceptable substitution but in this case it seems to directly affect the adjustment range of the trimmer. Thanks as always to the Drake group and in particularly, Garey, for all the support that is given. It’s appreciated !
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>> 73,
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>> Terry W4WTC
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12743. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:26:29 UTC
From: Steve Wedge
Topic: 12713 Message: 12743

You need to overcome the initial torque that's needed to set the adjuster into motion. The adjuster seems similar in size and properties to a low-E guitar string. Thus, it has some "springiness" when you first turn it.

I have not found any problems with using a pot-adjuster or standard technician's tool. You develop a feel for when to back off. I would suspect that something like rubber or plastic tubing would increase the backlash of the adjustment: if you can't find or don't want to use an adjuster, I'd go with the gator clip.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terrell Hamilton
Sent: Thursday, March 21, 2013 11:23 AM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] R-4A Passband tuner slugs

Would a piece of flexible tubing over the end of the slug work? I don't remember what it looks like, but if it will fit through the adjustment holes, it might be worth trying.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Wednesday, March 20, 2013 5:02 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4A Passband tuner slugs

I use a standard recessed flat blade technician's adjustment tool (known in its day as a "tweaker"). The blue Bournes PCB pot adjusters will serve the same purpose and make it MUCH easier than grabbing it with pliers!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al
Sent: Wednesday, March 20, 2013 5:42 PM

To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: [DrakeRadio] R-4A Passband tuner slugs

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat.
I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

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[Non-text portions of this message have been removed]

12744. Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:27:57 UTC
From: Steve Wedge
Topic: 12707 Message: 12744

Great information, Terry. It pays to observe what tubes are actually in use in a given set, as you never know what "the last guy" did with it

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terry Cantrell
Sent: Thursday, March 21, 2013 11:23 AM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Hi Garey:

One other point, and it may not be much of a problem, is that anyone who purchases the aftermarket replacement 2-AC calibrators will find they usually come with 6CB6A tubes. That tube works fine for signal generation but there must be slight differences in inter-electrode capacitances that may be the cause and limiting factors on the trimmer adjustment/interaction with the tube. I cannot find in any cross-references I've checked that the 6CB6A is a direct substitute for the 6BZ6. In my 2-A it made a significant difference.

73,

Terry W4WTC

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Thursday, March 21, 2013 10:44 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Calibrator Issue...Drake 2A, 2B

Terry -

I never seem to go far enough back, assuming too much!! Yes, the wrong tube 'could' be the cause...! :-)

Looks like it 'oughta' work, same base, same intended function (B&W TV IF), even very close to the same inter-element capacitances. So don't know 'why' it didn't work, but I might have tried the same tube if I didn't have a 6BZ6 or 6BA6.

Fixed anyway!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terry Cantrell wrote:
> Problem solved. The newer 2 AC Calibrator came with a new crystal and a 6CB6A tube. The original schematic calls for a 6BZ6 which I substituted and that solved the issue with the trimmer. Not sure if the 6CB6A is supposed to be an acceptable substitution but in this case it seems to directly affect the adjustment range of the trimmer. Thanks as always to the Drake group and in particularly, Garey, for all the support that is given. It’s appreciated !
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> 73,
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> Terry W4WTC
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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12745. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:34:07 UTC
From: Richard Knoppow
Topic: 12713 Message: 12745

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, March 21, 2013 8:23 AM
Subject: RE: [DrakeRadio] R-4A Passband tuner slugs

> Would a piece of flexible tubing over the end of the slug
> work? I don't
> remember what it looks like, but if it will fit through
> the adjustment
> holes, it might be worth trying.
>
>
>
> Terry K7WLD
>
> Wenatchee, WA

The slug adjusters are made of twisted wire with a flattened end. They are rather flexible. If you push something on to them to turn them it tends to move the slug when you remove it. The adjusters will also move in or out with pressure on them. They are slightly springy so have a lot of backlash when you try to use an ordinary socket type adjusting tool on them. I suspect the tubing would be no better. I don't remember what inspired me to try an alligator clip but I found they work. The clip holds the end of the wire tightly enough turn it without slipping and comes off without further moving it. They make a bothersome job easy. The bandpass assembly has four adjustable coils in it and a fifth adjustment, a lockable screw at the center which I think moves the entire rack to center it. The arrangement is interesting since it allows both variable bandwidth and enough tuning range to cover either sideband. The circuit works by varying the coupling of the coils but is not strict mutual induction coupling so the expansion is not symmetrical. You can find similar approaches to variable bandwidth in some Hallicrafters receivers where the band increases only in one direction. This is compensated for in the Drake IF by means of the calibration marks on the panel which indicate the effective center for the different bandwidths. By making the IF tunable Drake avoided the necessity of having to mechanically or electrically couple the BFO and VFO as was done (mechanical coupling) in the Collins 75A-4 to achieve the same purpose.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12746. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:49:49 UTC
From: JOHNQRZ@...
Topic: 12713 Message: 12746

The easy thing to do is take it to any blueprint shop, they can blow it up to any size you want ! I do it all the time, sometimes I blow a schematic up to poster size and put it on the wall above my bench. A little overkill I admit but I own a blueprint shop so at least it's free.

In a message dated 3/20/2013 2:42:12 P.M. Pacific Daylight Time, aschichler@gmail.com writes:

I'm sure this subject has been brought up before, but I can't really find a lot of information about it.
In the manual where it tells you to set the passband selector to .4 and the tuning knob to the center of the shortest line, and then adjust the four slugs on the rear of the passband tuner for max AVC voltage, it doesn't say what kind of tool to use. I think I got it pretty close by using a long-nose pliers, but it was very tedious, and I'm not sure I got them all adjusted dead-on.
I don't see any slots for an alignment tool, and the ends of the slugs that stick out of the holes are kind of pointy but maybe a little bit flat. I couldn't find anything that would work at all except a pliers. It seems like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

[Non-text portions of this message have been removed]

12747. Re: [DrakeRadio] R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:51:02 UTC
From: JOHNQRZ@...
Topic: 12713 Message: 12747

Sorry wrong thread......Hi HI

In a message dated 3/21/2013 9:49:53 A.M. Pacific Daylight Time,
JOHNQRZ@... writes:

The easy thing to do is take it to any blueprint shop, they can blow it up
to any size you want ! I do it all the time, sometimes I blow a schematic
up to poster size and put it on the wall above my bench. A little overkill
I admit but I own a blueprint shop so at least it's free.

In a message dated 3/20/2013 2:42:12 P.M. Pacific Daylight Time,
aschichler@... (mailto:aschichler@...) writes:

I'm sure this subject has been brought up before, but I can't really find
a
lot of information about it.
In the manual where it tells you to set the passband selector to .4 and
the tuning knob to the center of the shortest line, and then adjust the
four
slugs on the rear of the passband tuner for max AVC voltage, it doesn't
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what kind of tool to use. I think I got it pretty close by using a
long-nose pliers, but it was very tedious, and I'm not sure I got them all
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I don't see any slots for an alignment tool, and the ends of the slugs
that stick out of the holes are kind of pointy but maybe a little bit
flat.
I couldn't find anything that would work at all except a pliers. It seems
like there must be a better way to adjust those things. (maybe not)

Thanks for any advice,
Al, WA2S

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12748. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 16:54:31 UTC
From: JOHNQRZ@...
Topic: 12722 Message: 12748

Take them to your local blueprint shop, they can make them what ever size you want. I have blown up schematics in the past to 24x36 and put them on the wall over my bench....

In a message dated 3/20/2013 6:07:08 P.M. Pacific Daylight Time, k7sz@... writes:

I'm hitting up all three of my "boatanchor-type" lists in hopes someone has already done what I need to do and I won't have to reinvent the wheel.

Schematic diagrams: How does one take a small, in some cases a couple of pages out of a manual, enlarge them and put them together to obtain one, large schematic with no seams that and old phart (like me) can actually read!

My first thought was to hit Stapes or Office Max and have them take the two piece schematic from the HQ-110 and make a larger version.

Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.

So, anyone on these lists have any experience/background doing somethng similar to this??

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: _http://commobunker.blogspot.com/_ (http://commobunker.blogspot.com/)

("RED Noogie" Guru)

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12749. Fw: SPR-4 S Meter has become intermittent

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 18:29:14 UTC
From: R. Eric Sluder
Topic: 12749 Message: 12749

I sent this to the wrong email address. Please see my message below.

[Non-text portions of this message have been removed]

12750. Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 19:40:23 UTC
From: Al Schichler
Topic: 12713 Message: 12750

Thanks for the passband tuner info, Steve.
I have a bunch of alignment tools in my toolbox. I'll have to see if I have something that has a slot (vs a blade) that will fit the adjustment rods, or whatever you call those springy things. I like the idea of using a scope. I'll have to try that. It might be easier than the DMM I've been using.

I don't know why they didn't design that thing to make it a little easier to adjust.

73,
Al

12751. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-21 23:24:54 UTC
From: Mark Pilant
Topic: 12722 Message: 12751

I have Photoshop CS5 (CS6 is the most recent) and it can stitch together images. Look for File -> Automate -> Photomerge in the menu items.

73

- Mark N1VQW

12752. Re: [DrakeRadio] Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 00:19:23 UTC
From: Steve Wedge
Topic: 12713 Message: 12752

Yeah, the DMM has too much hysteresis to be of use in peaking circuits.

The tool I'm describing has a flat blade that is recessed into the tool. Think of a screwdriver blade inside the end of a Parliament cigarette filter end

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al Schichler
Sent: Thursday, March 21, 2013 3:40 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R-4A Passband tuner slugs

Thanks for the passband tuner info, Steve.
I have a bunch of alignment tools in my toolbox. I'll have to see if I have something that has a slot (vs a blade) that will fit the adjustment rods, or whatever you call those springy things. I like the idea of using a scope. I'll have to try that. It might be easier than the DMM I've been using.

I don't know why they didn't design that thing to make it a little easier to adjust.

73,
Al

[Non-text portions of this message have been removed]

12753. Re: [DrakeRadio] Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 00:53:08 UTC
From: Garey Barrell
Topic: 12713 Message: 12753

Take a look at my photos in the photo section. You probably have the
same end on one of your double ended tools.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
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>
> The tool I'm describing has a flat blade that is recessed into the tool. Think of a
screwdriver blade inside the end of a Parliament cigarette filter end
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
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>
> From: Al Schichler
> Sent: Thursday, March 21, 2013 3:40 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Re: R-4A Passband tuner slugs
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>
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> Thanks for the passband tuner info, Steve.
> I have a bunch of alignment tools in my toolbox. I'll have to see if I
> have something that has a slot (vs a blade) that will fit the adjustment
> rods, or whatever you call those springy things. I like the idea of
> using a scope. I'll have to try that. It might be easier than the DMM
> I've been using.
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> I don't know why they didn't design that thing to make it a little
> easier to adjust.
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> 73,
> Al
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12754. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 00:59:32 UTC
From: Jim Shorney
Topic: 12722 Message: 12754

On Wed, 20 Mar 2013 22:07:41 -0400, Ethan Blanton wrote:

>You may find the open source software package 'Hugin' useful:
>
>http://hugin.sourceforge.net/download/
>
>It's intended for panoramic photographs, but I suspect it will work
>quite well for high-contrast images such as schematics.

I actually tried Hugin for this, after producing several successful photo panoramas with it. No matter what I tried, I got some really bizarre output with schematic chunks as source images. I think it was the "lens correction" that Hugin uses; there is no profile, at least in the version I tried, for a perfectly flat source with no lens distortions. I gave up and haven't got back to it. Gimp and Corel Photopaint work.

FWIW, older CS2 stuff can be downloaded direct from Adobe, with serial numbers, here:

http://www.adobe.com/downloads/cs2_downloads/index.html

A tip for scanning text documents and schematics: to prevent bleed-through from the other side of the page, scan against a black background. I have a piece of black poster paper cut to the size of my flatbed. This may seem obvious, but it was a "DUH" moment when I finally figured it out. You may need to bump your tone curves a bit to get white back up to where it should be.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12755. David Ball : 3/22/2013 2:08:17 AM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 01:08:18 UTC
From: David Ball
Topic: 12755 Message: 12755

http://www.filateliaynumismaticagargon.com/jawwvr/mik.tjq David Ball

[Non-text portions of this message have been removed]

12756. Looking for some Drake 4-Line matching accessories

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 02:01:50 UTC
From: k4ash@...
Topic: 12756 Message: 12756

Looking for some Drake 4-Line matching accessories including the L-4 linear amplifier, C-4 control console, W-4 and WV-4 power meters, transmit and receive converters for the 50MHz (6 meter) and 144MHz (2 meter) bands, and antenna impedance matching networks (tuners), the MN-4 and MN-2000 as well as the MS-4 speaker.

[Non-text portions of this message have been removed]

12757. Hacked Off???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 13:17:33 UTC
From: daveincaol
Topic: 12757 Message: 12757

I think I've been hacked which has led to a redneck response from a member I don't want to know. I've pulled my membership. Bye!!

12758. Re: [DrakeRadio] Hacked Off???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 13:21:58 UTC
From: Gary Woods
Topic: 12757 Message: 12758

On Fri, 22 Mar 2013 13:17:33 -0000, you wrote:

>I think I've been hacked which has led to a redneck response

That's unfortunate; hacked accounts are a fact of life, especially Yahoo's
of late. Anybody here with a Yahoo email account would be wise to change
their PW from time to time.
For myself, I find this group too valuable to bail out when the occasional
annoyance pops up.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

12759. Re: [DrakeRadio] Hacked Off???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 14:49:08 UTC
From: Joe
Topic: 12757 Message: 12759

Sure wasn't a public response, that I saw. Wonder what the response was.

Joe Wolfe - WA6RKN
Moderator

----- Original Message -----
From: "daveincaol" <daveincaol@...>
Subject: [DrakeRadio] Hacked Off???

>I think I've been hacked which has led to a redneck response from a member
>I don't want to know. I've pulled my membership. Bye!!

12760. Re: [DrakeRadio] Hacked Off???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 15:08:28 UTC
From: Garey Barrell
Topic: 12757 Message: 12760

Dunno, but apparently the list wasn't valuable to him anyway.

I'm not sure, but I think we're supposed to be bereft at his loss! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Joe wrote:
> Sure wasn't a public response, that I saw. Wonder what the response was.
>
> Joe Wolfe - WA6RKN
> Moderator
>
> ----- Original Message -----
> From: "daveincaol" <daveincaol@...>
> Subject: [DrakeRadio] Hacked Off???
>
>
>> I think I've been hacked which has led to a redneck response from a member
>> I don't want to know. I've pulled my membership. Bye!!
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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12761. Don't leave due to one idiot.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 16:30:32 UTC
From: Dan Galligan
Topic: 12761 Message: 12761

Dave,
I got hacked once, and had several responses from sheer idiots, who simply were not capable of comprehending the act. But, this is the best list, of it's kind, bar none, and to remain so, it needs as many different opinions contributing, as possible. I would hate to see that someone would leave over the actions of one idiot.
I remain a member on a couple of lists, who really set off my ire, due to over-moderation, and they over moderate, because of a few members who complain, simply because of those types of complaints.
I even got a snarky reply from someone, here, once, because of a rotating political signature line, that came up on my iPhone. Some folks just can't figure out where the delete button is, and have to whine and cry, when all they needed to do, was hit the delete button.
Please, don't let one fool, raise your ire, so much, as to leave this wonderful group of helpful people.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

Some say that investment in precious metals, like gold, platinum and silver, is a hedge against economic downturns. Personally, I choose to invest in Blued Steel, brass and copper jacketed lead.

Sent from my somewhat brighter, larger, electronic leash.

[Non-text portions of this message have been removed]

12762. Re: [DrakeRadio] Looking for some Drake 4-Line matching accessories

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 17:31:40 UTC
From: Steve Wedge
Topic: 12756 Message: 12762

There's a nice-looking C-4 on eBay right now, but he's started it at $700 and it's missing the antenna switch...

Still, they don't come along that often. I'm happy to say that I own one (with the switch and the power controller) but won't be parting with it...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: k4ash@...
Sent: Thursday, March 21, 2013 10:01 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Looking for some Drake 4-Line matching accessories

Looking for some Drake 4-Line matching accessories including the L-4 linear amplifier, C-4 control console, W-4 and WV-4 power meters, transmit and receive converters for the 50MHz (6 meter) and 144MHz (2 meter) bands, and antenna impedance matching networks (tuners), the MN-4 and MN-2000 as well as the MS-4 speaker.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12763. Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 19:50:14 UTC
From: Al Schichler
Topic: 12713 Message: 12763

I'm sure I have alignment tools like you are describing, with a flat blade recessed in a cylindrical housing. I'm not sure just how that will grab and turn those adjustment rods/wires connected to the slugs. It seems to me that it has to be more like a slot than a blade, but maybe I'm just confused about that.
I'll take a look at all my alignment tools and see if any of them look like they might work.

12764. Re: [DrakeRadio] Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 20:05:15 UTC
From: Garey Barrell
Topic: 12713 Message: 12764

LOOK in the Photo section under K4OAH

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Al Schichler wrote:
> I'm sure I have alignment tools like you are describing, with a flat
> blade recessed in a cylindrical housing. I'm not sure just how that will
> grab and turn those adjustment rods/wires connected to the slugs. It
> seems to me that it has to be more like a slot than a blade, but maybe
> I'm just confused about that.
> I'll take a look at all my alignment tools and see if any of them look
> like they might work.
>
>

12765. Considering a Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 20:00:25 UTC
From: branton_thomas
Topic: 12765 Message: 12765

Good afternoon everyone,

After a long absence from ham radio I am excited about re-entering the hobby and I am interested in a TR-7 station. If I found a nice one perhaps I could later add the R-7 receiver.

Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.

Thanks and 73's

Tom
Ex WD5DFE

12766. Re: Bringing my TR-4 back to life... final problem list

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 21:10:36 UTC
From: matt.newman10
Topic: 12677 Message: 12766

Mark,

Your recent documentation of work performed on your TR-4 is very much appreciated. I, too, recently repaired a TR-4 with the benefit of the group. With your shared experience I've been able to expand and update my own knowledge base.

The front panel of your TR-4 appears to be in very good shape based on the image you uploaded. I was not so fortunate with a large round scratch under the RE TUNE knob. I ordered a replacement panel from Tony, KF8MW, and with last year's PS rebuild (AC4R), my s/n 26104 looks and performs like new - thanks to help and introductions received from the group.

Many thanks, Mark, for an informative write-up.

73,

Matt, VA3MGN/AA1VN

--- In DrakeRadio@yahoogroups.com, Mark Pilant <n1vqw@...> wrote:
>
> While my TR-4 is now usable, there are still some remaining minor
> problems to be addressed:
> o Sometimes, when switching from X-CW to SSB after tuning
> up, the receiver is still muted. However, switching back
> to X-CW and then to SSB again seems to "fix" the problem.
> o While listing on the 10m net Sunday, I was hearing almost
> a low frequency "pulse" type noise. I'd put it about 10
> to 20 Hz. It was not AC hum. It is less on the lower
> frequency bands, but still there. It is also more
> pronounced the higher the audio gain.
> o The S-Meter zeroing doesn't seem to "hold". When switching
> around the bands, the zeroing of the S-Meter will have to
> adjusted. BTW, I'll switch over to my dummy load before
> adjusting just to eliminate as many spurious signals as
> possible.
> o There seems to be some audio "bleed-through" in my head
> phones when transmitting. (I'm using Kenwood HS-5 head
> phones.) When I transmit, I can definitely hear my audio
> in my ears.
>
> All of these need to be fixed, but as I said, the rig is usable
> and it does transmit and receive well.
>
> My first step is going to be to check through the archives to see
> if others have reported the same problems.
>

> Now I need to rebuild my AC-3 and attend to my ailing TR-3 :-P
>
> 73
>
> - Mark N1VQW
>

12767. Re: [DrakeRadio] Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 21:34:06 UTC
From: Chgypsy@...
Topic: 12767 Message: 12767

TBranton@... writes:

Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.
Tom
Ex WD5DFE
Hello Tom,
Would suggest you go to _www.wb4hfn.com_ (http://www.wb4hfn.com) (DRAKE) and looking at the file on whats in a TR-7. That file explains how to tell early from late (one piece back vs three piece back) as an example. Black cases vs the dark gray etc. Different boards early late etc. There is also a section on used gear pricing. You can spend hours on that website.

Personally I'd be looking for one with functioning digits, the digital board was an option, then did it have the NB7 (noise blanker board) or not. The Aux 7 board is not a critical item as you can use the up/down to get there. I built my own.

Package station on Epay did look nice but I didn't really study. Have you looked at _http://swap.qth.com/_ (http://swap.qth.com/) .
One way or another welcome home and good luck. Carl wd8nhk

[Non-text portions of this message have been removed]

12768. Re: [DrakeRadio] Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 21:36:39 UTC
From: Chgypsy@...
Topic: 12767 Message: 12768

ADDED item what filters are in the unit for audio. Comes standard with a 2.4 khz....if you do cw you would probably like a 500 too... (positions for 3 additional) The AM stuff you can do with a resistor, and that's in the WB4HFN stuff.
Carl wd8nhk

In a message dated 3/22/2013 4:06:11 P.M. Eastern Daylight Time, TBranton@... writes:

Any words of wisdom from past or present TR-7 owners would be most welcome.

[Non-text portions of this message have been removed]

12769. Re: [DrakeRadio] Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-22 23:32:07 UTC
From: Steve Wedge
Topic: 12713 Message: 12769

I've just shoved it on and turned. The tool did the rest

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al Schichler
Sent: Friday, March 22, 2013 3:50 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R-4A Passband tuner slugs

I'm sure I have alignment tools like you are describing, with a flat
blade recessed in a cylindrical housing. I'm not sure just how that will
grab and turn those adjustment rods/wires connected to the slugs. It
seems to me that it has to be more like a slot than a blade, but maybe
I'm just confused about that.
I'll take a look at all my alignment tools and see if any of them look
like they might work.

[Non-text portions of this message have been removed]

12770. Re: [DrakeRadio] Considering a Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 02:30:53 UTC
From: Garey Barrell
Topic: 12765 Message: 12770

Tom -

Welcome to the group! I'm kind of surprised you haven't gotten more replies. There are several very knowledgeable TR-7 owners on here.

I think it's a great radio, I have a TR-7 and R-7 pair on my desk right now. It doesn't haveall the multifunction (press button A three times in less than 2 seconds to change bandwidth, etc.,) but it also does not have all of the custom ICs that the manufacturer discontinues after a few newer models come out! :-)

The radio is 30+ years old, all but some cosmetic parts are still available, no surface mount parts, i.e.,you can repair it yourself if necessary. The majority of problems are the result of mild corrosion on the plug-in card connectors, easily fixed by merely pulling up slightly and reseating.

In my experience a serial number above 6000 would appear to have all the 'latest' upgrades. The TR-7A came at about 10,000, and essentially the only difference was the optional CW filter, Noise Blanker, and a surge suppressor on the antenna input. The "A" increases the price considerably because of it's rarity for collectors, but is not and 'improve' radio.

Check <www.WB4HFN.com> for a lot of information on the TR-7 and all the other Drake products.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

branton_thomas wrote:
> Good afternoon everyone,
>
> After a long absence from ham radio I am excited about re-entering the hobby and I am interested in a TR-7 station. If I found a nice one perhaps I could later add the R-7 receiver.
>
> Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.
>
> Thanks and 73's
>

> Tom
> Ex WD5DFE
>
>

12771. Re: [DrakeRadio] Considering a Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 04:00:02 UTC
From: Jim Shorney
Topic: 12765 Message: 12771

Tom,

You have lots of good comments already. The price you pay will vary, depending on options installed. I would look at the filter compliment to see if it fits your operating needs. My personal preference is a narrow SSB filter and one CW filter, at least. The noise blanker is nice to have, it can be quite effective on some types of power line noise. Despite opinions to the contrary, I have found it to make the difference between making contacts and hearing almost nothing when the power lines around me get active.

I think it has been mentioned that you can find better deals at hamfests than online. Although I have a friend who has had reasonably good luck with several eBay TR-7 purchases, I have seen several good deals recently at hamfests. Unless the seller *knows* what options are installed, you really need to pull the covers off to be sure. The matching PS-7 is not a "must have" to use the radio, but it is a well built unit that seems practically bullet proof.

Be prepared to do a little maintenance. The TR-7 can develop intermittent connections in the Molex PC board connectors over time. Easy to fix. A check of the fixed passband alignment is also recommended, and easy to do even if you don't have test gear. There is one electrolytic cap in the radio that I recommend to be replaced due to age. The rest are getting old too, but seem to be holding up reasonably well.

The R-7 is a nice cherry to add to the package. It has some features that compliment the TR-7 nicely, and adds a degree of flexibility that you will only truly appreciate after you use the combo for a while, without all the button pushing that Garey speaks of.

Fans. You will want fans on both the TR-7 and the PS-7. The fan is an off the shelf part in a standard form factor, so they are easy to add. You will pay a premium for a loose fan with the "FA-7" sticker, but OEM equivalents are cheap in the surplus market. It's a 19 CFM, 120V, as I recall. I have some 32 CFM NMB fans that would fit nicely, but they are way too loud for continuous use. I put one on a DL-1000, it looks just like an FA-7 without the sticker!

7-line gear is primo stuff, IMHO. Properly running, you won't find a better rig for the price. I've had one for 25+ years, and they will have to pry it from my cold, dead hands...

73

-Jim
NU0C

On Fri, 22 Mar 2013 20:00:25 -0000, branton_thomas wrote:

>Good afternoon everyone,
>
>After a long absence from ham radio I am excited about re-entering the hobby and I am interested in a TR-7 station. If I found a nice one perhaps I could later add the R-7 receiver.
>
>Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.
>
>Thanks and 73's
>
>Tom
>Ex WD5DFE
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12772. Re: [DrakeRadio] Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 13:22:45 UTC
From: Chgypsy@...
Topic: 12772 Message: 12772

Hi all,

Selling my Drake TR-M.. M = Marine
It is brand new, never put it in the boat.
Obviously never used, still in its original Drake unopened box.

This is an HF rig. SSB or AM 150W PEP

It has the optional 12 V power supply.
It has a built in antenna tuner, can tune a 23 ft vert. antenna, long wire
or ?
It has a mic , which I understand will be a Turner by brand.
Assuming typical new Drake the manual for same will be in the box.

If interested please contact off list at _Chgypsy@..._
(mailto:Chgypsy@...)
Carl WD8NHK

[Non-text portions of this message have been removed]

12773. Re: Considering a Drake TR-7. Recommendations?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 13:43:37 UTC
From: branton_thomas
Topic: 12765 Message: 12773

Good morning everyone,

I wanted to send my thanks for the guidance and recommendations I received from members. I got some great advice and a lead on what may be a fine rig for me. If a further thought occurs to anyone you would like to share on the TR-7, please do so.

Kindest regards and 73's

Tom

--- In DrakeRadio@yahoogroups.com, "branton_thomas" <TBranton@...> wrote:
>
> Good afternoon everyone,
>
> After a long absence from ham radio I am excited about re-entering the hobby and I am interested in a TR-7 station. If I found a nice one perhaps I could later add the R-7 receiver.
>
> Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.
>
> Thanks and 73's
>
> Tom
> Ex WD5DFE
>

12774. looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 13:51:30 UTC
From: yash@aol.com
Topic: 12774 Message: 12774

Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
THANKS
DALE WT4T

[Non-text portions of this message have been removed]

12775. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 14:02:50 UTC
From: Michael Shelly
Topic: 12774 Message: 12775

I have a nice tx4c works great is very clean just has a small scatch on front. Will sell $350.00 plus shipping. E-mail me off site and I'll send pics.

Mike
WB2KKI

>_____
>From: "yash@...m" <yash@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Saturday, March 23, 2013 9:51 AM
>Subject: [DrakeRadio] looking for t4x transmitter
>
>
>Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
>THANKS
>DALE WT4T
>
>[Non-text portions of this message have been removed]
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>

[Non-text portions of this message have been removed]

12776. Re: [DrakeRadio] Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 14:27:48 UTC
From: Barry
Topic: 12772 Message: 12776

On YouTube, there was a fellow looking for one of these. Look for Drake TR-M. If you don't find it, let me know.

Regards,
Barry - N4BUQ

Sent from my iPad

On Mar 23, 2013, at 8:22 AM, Chgypsy@... wrote:

> Hi all,
>
> Selling my Drake TR-M.. M = Marine
> It is brand new, never put it in the boat.
> Obviously never used, still in its original Drake unopened box.
>
>
> This is an HF rig. SSB or AM 150W PEP
>
> It has the optional 12 V power supply.
> It has a built in antenna tuner, can tune a 23 ft vert. antenna, long wire
> or ?
> It has a mic , which I understand will be a Turner by brand.
> Assuming typical new Drake the manual for same will be in the box.
>
> If interested please contact off list at _Chgypsy@..._
> (mailto:Chgypsy@...)
> Carl WD8NHK
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12777. Re: [DrakeRadio] Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 14:29:20 UTC
From: Barry
Topic: 12772 Message: 12777

Here's the link:

http://www.youtube.com/watch?v=0sKX3lJCC3c

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Barry" <n4buq@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, March 23, 2013 9:27:48 AM
> Subject: Re: [DrakeRadio] Drake TR-M
>
> On YouTube, there was a fellow looking for one of these. Look for
> Drake TR-M. If you don't find it, let me know.
>
> Regards,
> Barry - N4BUQ
>
> Sent from my iPad
>
> On Mar 23, 2013, at 8:22 AM, Chgypsy@... wrote:
>
> > Hi all,
> >
> > Selling my Drake TR-M.. M = Marine
> > It is brand new, never put it in the boat.
> > Obviously never used, still in its original Drake unopened box.
> >
> >
> > This is an HF rig. SSB or AM 150W PEP
> >
> > It has the optional 12 V power supply.
> > It has a built in antenna tuner, can tune a 23 ft vert. antenna,
> > long wire
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> > It has a mic , which I understand will be a Turner by brand.
> > Assuming typical new Drake the manual for same will be in the box.
> >
> > If interested please contact off list at _Chgypsy@..._
> > (mailto:Chgypsy@...)
> > Carl WD8NHK
> >
> >
> >
> > [Non-text portions of this message have been removed]

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12778. Re: [DrakeRadio] Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 14:53:40 UTC
From: Chgypsy@...
Topic: 12772 Message: 12778

n4buq@... writes:

On YouTube, there was a fellow looking for one of these. Look for
> Drake TR-M. If you don't find it, let me know.
>
> Regards,
> Barry - N4BUQ
He didn't want one, that was his on a demo run. Carl wd8nhk

[Non-text portions of this message have been removed]

12779. "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 15:48:42 UTC
From: Eddy Swynar
Topic: 12779 Message: 12779

Good Day All,

Does anyone else have one of these excellent testers in the shack...?

If so, is there any chance that yours may include the testing settings / parameters for relatively newer compactron tubes, such as the 6T9, 6U10, etc. etc.?

Many thanks!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

12780. Re: [DrakeRadio] Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 16:05:12 UTC
From: Barry
Topic: 12772 Message: 12780

Look in the comments. Someone was indeed wanting to buy one. That was about 10 months ago, though.

Regards,
Barry -N4BUQ

Sent from my iPad

On Mar 23, 2013, at 9:53 AM, Chgypsy@... wrote:

>
>
> n4buq@... writes:
>
> On YouTube, there was a fellow looking for one of these. Look for
>> Drake TR-M. If you don't find it, let me know.
>>
>> Regards,
>> Barry - N4BUQ
> He didn't want one, that was his on a demo run. Carl wd8nhk
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12781. Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 20:11:54 UTC
From: VE3AX/7
Topic: 12779 Message: 12781

Eddy:

I have one of those – came across it at a very attractive price last summer. Not at home until tomorrow evening but will check and see – it's the one with the compactron adapters so should have the data as well. LOTS of switches on that tester, aren't there!

Not sure what to do with the 9-66 now – offered to help an 80 year old remove his towers and antennas last week and he wouldn't let me leave without taking his TV-7C/u tube tester, along with a National NC-125 and a Trio 9R-4!

Back to you late tomorrow evening.

73

Peter
VE3AX/7

From: Eddy Swynar
Sent: Saturday, March 23, 2013 8:48 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Good Day All,

Does anyone else have one of these excellent testers in the shack...?

If so, is there any chance that yours may include the testing settings / parameters for relatively newer compactron tubes, such as the 6T9, 6U10, etc. etc.?

Many thanks!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12782. Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 20:20:01 UTC
From: Eddy Swynar
Topic: 12779 Message: 12782

On 2013-03-23, at 4:11 PM, VE3AX/7 wrote:

> Eddy:
>
> I have one of those ? came across it at a very attractive price last summer. Not at home until tomorrow evening but will check and see ? it?s the one with the compactron adapters so should have the data as well. LOTS of switches on that tester, aren?t there!
>
> Not sure what to do with the 9-66 now ? offered to help an 80 year old remove his towers and antennas last week and he wouldn?t let me leave without taking his TV-7C/u tube tester, along with a National NC-125 and a Trio 9R-4!
>
> Back to you late tomorrow evening.
>
> 73
>
> Peter
> VE3AX/7
>

Hi Peter,

Gee, that'd be just great! Many thanks...

I bought mine here some 10 years ago, basically just to shut-up a fellow worker who had one left-over from his father-in-law's estate. I gave him $25.00, & he was as happy as a pig in...well, you know what!

Since acquiring it, Ithough, have really come to appreciate the thing---it'll event test 811A's, 6146's, & 866A's! What a wonderful tool. Mine came with extra booklets & sheets that show how to test tubes even as old as the 201A---but there is NOTHING re. the testing of compactrons...

So Peter, if you have details re. these, I would really love to hear from you!

Many thanks in advance, & vy

~73!~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

12783. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-23 20:40:14 UTC
From: yash@aol.com
Topic: 12774 Message: 12783

Mike
would like to see a coupla of pictures of the C.
thanks
dale wt4t

-----Original Message-----
From: Michael Shelly <wb2kki@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Mar 23, 2013 10:02 am
Subject: Re: [DrakeRadio] looking for t4x transmitter

I have a nice tx4c works great is very clean just has a small scatch on front. Will sell $350.00 plus shipping. E-mail me off site and I'll send pics.

Mike
WB2KKI

>_____
>From: "yash@...sh@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Saturday, March 23, 2013 9:51 AM
>Subject: [DrakeRadio] looking for t4x transmitter
>
>
>Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
>THANKS
>DALE WT4T
>
>[Non-text portions of this message have been removed]
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12784. T-4 Reciter woes...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 04:45:42 UTC
From: qrper
Topic: 12784 Message: 12784

All right boys and girls, I have a strange one on the bench.

It's the rather rare Drake T-4 reciter.

here's the problem

With NO injection from any receiver (the T4 has NO vfo)

I'm producing 140+ watts

Only it's on 5.64 mhz. Yeah, the carrier oscillator freq.
And about 140+ watts on 11.3XX, double the carrier freq.

Transmitter gain at zero, 140 watts out on those two freq. So, yeah, something is singing and passing the carrier freq.

so, Pulled the 12ax7 V1, and with NO tube in the oscillator circuit, whoa! 140+ watts out.

If I take my oscope probe or the meter probe and touch pin 5 of the 12ba6 just out of the balanced modulator, the output goes to zero. Just touch it!!! that's all and NO rf output.

of course I've swapped in known good tubes, and no joy.

Tested all tube

Volages at the tubes seem to be within reason.

This one has me scratching my head...

anyone?

Mike, wb8vge

12785. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 05:04:17 UTC
From: Howard Traxler
Topic: 12538 Message: 12785

Hi Garey and thanks. Finally got to check out the local oscilators.

Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.

Garey: the crystal oscillator runs at 21.5 MHz.
Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.

I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.

Further suggestions, please? Thank you.

Howard, WA9RYF

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, March 13, 2013 11:53 AM
Subject: Re: [DrakeRadio] My non-working TR-4

On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
the crystal oscillator runs at 21.5 MHz.

Yes, only PA tubes inside the cage.

Don't remove tubes from sockets, just rock them back and forth a little one at a time.

Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
>
> Are the three finals the only tubes in the final cage?

>
> It's hard to physically check all the tubes. There are so many I get confused.
>
> Would that protection bulb be inside the cage with the finals?
>
> What frequency can I listen to to hear local oscilators from the receiver?
>
> These answers will give me something to do a while. Thanks to you and Don.
>
> 73, WA9RYF
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 13, 2013 9:57 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Howard -
>
> That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> #47 bulb, just with a bi-pin base.
>
> Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> problem if that is the cause.
>
> You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> rigs with ALL connected to their own antenna, the bulb isn't necessary.
>
> I assume it wasn't the slide switch on the side.?
>
> Do you have PA idle current when PTT is closed?
>
> Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> times. Not the PA tubes.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>

>
> Howard Traxler wrote:
> > Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.
> >
> > 73,
> > Howard
> > ----- Original Message -----
> > From: Don Cunningham
> > To: DrakeRadio@yahoogroups.com
> > Sent: Tuesday, March 12, 2013 9:56 PM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
> > 73,
> > Don
> >
> > [Non-text portions of this message have been removed]
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12786. TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 14:23:37 UTC
From: slowcountry1
Topic: 12786 Message: 12786

The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).

Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.

Two days ago, I proceeded with the rest of the alignment process. Most everything was already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.

Yesterday, I completed the work by cleaning the chassis top. I attempted to remove the old cigarette scum with toothbrushes and distilled water. Unfortunately, the chassis lettering vaporized but the scum did not. I was able to remove all of the grime with 409 household cleaner and a tooth brush. Aluminum cleaner was used on the SSB filter tops, connecting rods to the front panel and the three tube covers. Everything looks quite beautiful. There is however some minor discoloration / or possibly corrosion in a few places. I did not attempt to clean the bottom of the chassis.

I have a source for new light bulb and blue filter material. The covers will be going back on the rig within the next couple of days, hopefully and will actually signify its completion.

If one were to compare this rig to a brand new factory unit, I would suspect the grade would be 8 out of 10. I am extremely happy to have the unit back at full tilt, not only because I absolutely enjoy operating it, but the fact that it was left to me by my deceased grandfather 10+ years ago.

Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.

Through the help of those on this list, I have gained quite a bit of experience and confidence working with this gear. I wish to express my gratitude to those people who maintain, contribute and moderate the list and for the willingness to help a fellow ham. To anyone attempting a repair or restoration, Garey's CD's are an invaluable tool and in my opinion, a must.

Thanks to all,

Doug Coffman
N9XTF

12787. Re: TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 14:57:07 UTC
From: slowcountry1
Topic: 12786 Message: 12787

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
> The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).
>
> Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.
>
> Two days ago, I proceeded with the rest of the alignment process. Most everything was already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.
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> Yesterday, I completed the work by cleaning the chassis top. I attempted to remove the old cigarette scum with toothbrushes and distilled water. Unfortunately, the chassis lettering vaporized but the scum did not. I was able to remove all of the grime with 409 household cleaner and a tooth brush. Aluminum cleaner was used on the SSB filter tops, connecting rods to the front panel and the three tube covers. Everything looks quite beautiful. There is however some minor discoloration / or possibly corrosion in a few places. I did not attempt to clean the bottom of the chassis.
>
> I have a source for new light bulb and blue filter material. The covers will be going back on the rig within the next couple of days, hopefully and will actually signify its completion.
>
> If one were to compare this rig to a brand new factory unit, I would suspect the grade would be 8 out of 10. I am extremely happy to have the unit back at full tilt, not only because I absolutely enjoy operating it, but the fact that it was left to me by my deceased grandfather 10+ years ago.
>
> Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.
>
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>
> Thanks to all,
>
> Doug Coffman

> N9XTF
>

For prosperity sake, I uploaded some before and after chassis photos.

12788. Re: [DrakeRadio] Re: TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 15:10:01 UTC
From: k3xr@...
Topic: 12786 Message: 12788

Great job Doug...I recently completed restoring a TR-CWrit, love the rig, photos on my QRZ page. Regards, DAN K3XR

http://home.comcast.net/~k3xr/

----- Original Message -----
From: "slowcountry1" <dcoffman@pdswireless.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, March 24, 2013 10:57:07 AM
Subject: [DrakeRadio] Re: TR-4Cw completed

--- In DrakeRadio@yahoogroups.com , "slowcountry1" <dcoffman@...> wrote:
>
> The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).
>
> Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.
>
> Two days ago, I proceeded with the rest of the alignment process. Most everything was already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.
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>
> Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.

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> Through the help of those on this list, I have gained quite a bit of experience and confidence working with this gear. I wish to express my gratitude to those people who maintain, contribute and moderate the list and for the willingness to help a fellow ham. To anyone attempting a repair or restoration, Garey's CD's are an invaluable tool and in my opinion, a must.
>
> Thanks to all,
>
> Doug Coffman
> N9XTF
>

For prosperity sake, I uploaded some before and after chassis photos.

[Non-text portions of this message have been removed]

12789. Re: TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 15:24:39 UTC
From: slowcountry1
Topic: 12786 Message: 12789

I purchased a TR-4CW with RIT about 10years ago as a project radio and then ham radio fell by the wayside. The person I purchased the rig from stored in a very wet environment, the chassis has a great deal of rust. Upon inspection, there have been a bunch of unknown modifications, a real hack job. Someone painted the tube covers black and put a real crappy black paint job on it. Some day, I will revisit the idea of refurbishing the rig but its going to take an act of god to get it going.

I would love to get that one going, that would be a real accomplishment.

Doug

--- In DrakeRadio@yahoogroups.com, k3xr@... wrote:
>
> Great job Doug...I recently completed restoring a TR-CWrit, love the rig, photos on my QRZ page. Regards, DAN K3XR
>
>
> http://home.comcast.net/~k3xr/
>
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, March 24, 2013 10:57:07 AM
> Subject: [DrakeRadio] Re: TR-4Cw completed
>
>
>
>
>
>
>
>
>
> --- In DrakeRadio@...m , "slowcountry1" <dcoffman@> wrote:
> >
> > The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).
> >
> > Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.
> >
> > Two days ago, I proceeded with the rest of the alignment process. Most everything was

already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.
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> > Yesterday, I completed the work by cleaning the chassis top. I attempted to remove the old cigarette scum with toothbrushes and distilled water. Unfortunately, the chassis lettering vaporized but the scum did not. I was able to remove all of the grime with 409 household cleaner and a tooth brush. Aluminum cleaner was used on the SSB filter tops, connecting rods to the front panel and the three tube covers. Everything looks quite beautiful. There is however some minor discoloration / or possibly corrosion in a few places. I did not attempt to clean the bottom of the chassis.
> >
> > I have a source for new light bulb and blue filter material. The covers will be going back on the rig within the next couple of days, hopefully and will actually signify its completion.
> >
> > If one were to compare this rig to a brand new factory unit, I would suspect the grade would be 8 out of 10. I am extremely happy to have the unit back at full tilt, not only because I absolutely enjoy operating it, but the fact that it was left to me by my deceased grandfather 10+ years ago.
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> > Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.
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> >
> > Thanks to all,
> >
> > Doug Coffman
> > N9XTF
> >
>
> For prosperity sake, I uploaded some before and after chassis photos.
>
>
>
>
> [Non-text portions of this message have been removed]
>

12790. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 15:32:49 UTC
From: Garey Barrell
Topic: 12538 Message: 12790

Howard -

OK.

The 9.00 MHz is good, and 'should' be heard on all bands. That is the Carrier Oscillator. When you switch to CW or AM, it is 'moved' about 1 kHz lower in frequency.

The 21.5 MHz is good, and 'should' be heard only on 40M. That is the Heterodyne Oscillator. It will be different for each band.

When the PTO is tuned to the '000' point, it should be heard at 5 MHz. This is a tunable oscillator, and so may be a few kHz, (up to 10,) either side of this frequency.

The final cage isn't that hard to remove, the TUNE and LOAD shafts just pull out of the couplers that go through the side, and then remove the small screws. Obviously power off and power supply unplugged.

You didn't answer whether you had PA Bias current when you closed the PTTas described in Section 4, para A in the manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Hi Garey and thanks. Finally got to check out the local oscilators.
>
> Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
>
> Garey: the crystal oscillator runs at 21.5 MHz.
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> I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
>
> Further suggestions, please? Thank you.
>

> Howard, WA9RYF
>
>
>
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 13, 2013 11:53 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> the crystal oscillator runs at 21.5 MHz.
>
> Yes, only PA tubes inside the cage.
>
> Don't remove tubes from sockets, just rock them back and forth a little one at a time.
>
> Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
> > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> >
> > Are the three finals the only tubes in the final cage?
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> > It's hard to physically check all the tubes. There are so many I get confused.
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> > Would that protection bulb be inside the cage with the finals?
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> > What frequency can I listen to to hear local oscilators from the receiver?
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> > 73, WA9RYF
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, March 13, 2013 9:57 AM

> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > Howard -
> >
> > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > #47 bulb, just with a bi-pin base.
> >
> > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> > problem if that is the cause.
> >
> > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
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> > Do you have PA idle current when PTT is closed?
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> > times. Not the PA tubes.
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> > 73, Garey - K4OAH
> > Glen Allen, VA
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> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> > >
> > > 73,
> > > Howard
> > > ----- Original Message -----
> > > From: Don Cunningham
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Tuesday, March 12, 2013 9:56 PM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >

> > >
> > >
> > > Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
> > > 73,
> > > Don
> > >
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> Yahoo! Groups Links
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12791. Re: [DrakeRadio] T-4 Reciter woes...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 15:43:49 UTC
From: Garey Barrell
Topic: 12784 Message: 12791

Mike -

Yes, the CO runs at 5.645 MHz, and if the transmitter is keyed with
_NO LO_, the RF TUNE, TUNE and LOAD can all be adjusted to 5.645 or
11.3xx just fine for full output. A T-4X will do the same thing if
the PreMixer is dead.

No mystery....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> All right boys and girls, I have a strange one on the bench.
>
> It's the rather rare Drake T-4 reciter.
>
> here's the problem
>
> With NO injection from any receiver (the T4 has NO vfo)
>
> I'm producing 140+ watts
>
> Only it's on 5.64 mhz. Yeah, the carrier oscillator freq.
> And about 140+ watts on 11.3XX, double the carrier freq.
>
> Transmitter gain at zero, 140 watts out on those two freq. So, yeah, something is singing
and passing the carrier freq.
>
> so, Pulled the 12ax7 V1, and with NO tube in the oscillator circuit, whoa! 140+ watts
out.
>
> If I take my oscope probe or the meter probe and touch pin 5 of the 12ba6 just out of the
balanced modulator, the output goes to zero. Just touch it!!! that's all and NO rf output.
>
> of course I've swapped in known good tubes, and no joy.
>
> Tested all tube
>
> Volages at the tubes seem to be within reason.
>
> This one has me scratching my head...

>
> anyone?
>
> Mike, wb8vge
>
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> ------------------------------------
>
> Yahoo! Groups Links
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12792. Re: [DrakeRadio] T-4 Reciter woes...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 15:54:15 UTC
From: Garey Barrell
Topic: 12784 Message: 12792

Mike -

I just re-read your post, and this is probably just a bit different.
Since V1 is out, V2 must be oscillating on it's own. It is just a
buffer amp, and with no drive it could very well oscillate. I assume
the frequency is not 'exactly' 5.645 MHz!

Again, not likely a real problem, just an anomaly for a stage that is
sitting there with no drive.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> All right boys and girls, I have a strange one on the bench.
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> It's the rather rare Drake T-4 reciter.
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>
> With NO injection from any receiver (the T4 has NO vfo)
>
> I'm producing 140+ watts
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> Only it's on 5.64 mhz. Yeah, the carrier oscillator freq.
> And about 140+ watts on 11.3XX, double the carrier freq.
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balanced modulator, the output goes to zero. Just touch it!!! that's all and NO rf output.
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> of course I've swapped in known good tubes, and no joy.
>
> Tested all tube
>
> Volages at the tubes seem to be within reason.
>

> This one has me scratching my head...
>
> anyone?
>
> Mike, wb8vge
>
>

12793. Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 16:01:39 UTC
From: Eddy Swynar
Topic: 12779 Message: 12793

Hi Peter,

Stop the presses...! Hi Hi

I just received all the info that I needed, so save yourself the work...many thanks for all your efforts...!

~73~ de Eddy VE3CUI - VE3XZ

On 2013-03-23, at 4:11 PM, VE3AX/7 wrote:

> Eddy:
>
> I have one of those ? came across it at a very attractive price last summer. Not at home until tomorrow evening but will check and see ? it?s the one with the compactron adapters so should have the data as well. LOTS of switches on that tester, aren?t there!
>
> Not sure what to do with the 9-66 now ? offered to help an 80 year old remove his towers and antennas last week and he wouldn?t let me leave without taking his TV-7C/u tube tester, along with a National NC-125 and a Trio 9R-4!
>
> Back to you late tomorrow evening.
>
> 73
>
> Peter
> VE3AX/7
>
> From: Eddy Swynar
> Sent: Saturday, March 23, 2013 8:48 AM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester
>
> Good Day All,
>
> Does anyone else have one of these excellent testers in the shack...?
>
> If so, is there any chance that yours may include the testing settings / parameters for relatively newer compactron tubes, such as the 6T9, 6U10, etc. etc.?
>
> Many thanks!
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
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12794. Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 16:27:47 UTC
From: VE3AX/7
Topic: 12779 Message: 12794

Great news Eddie. I'll still check out what I have though and let you know. Perhaps I need that info as well myself.

73

Peter
VE3AX/7

-----Original Message-----
From: Eddy Swynar
Sent: Sunday, March 24, 2013 9:01 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Hi Peter,

Stop the presses...! Hi Hi

I just received all the info that I needed, so save yourself the work...many thanks for all your efforts...!

~73~ de Eddy VE3CUI - VE3XZ

On 2013-03-23, at 4:11 PM, VE3AX/7 wrote:

> Eddy:
>
> I have one of those – came across it at a very attractive price last
> summer. Not at home until tomorrow evening but will check and see – it’s
> the one with the compactron adapters so should have the data as well. LOTS
> of switches on that tester, aren’t there!
>
> Not sure what to do with the 9-66 now – offered to help an 80 year old
> remove his towers and antennas last week and he wouldn’t let me leave
> without taking his TV-7C/u tube tester, along with a National NC-125 and a
> Trio 9R-4!
>
> Back to you late tomorrow evening.
>
> 73
>
> Peter
> VE3AX/7
>
> From: Eddy Swynar
> Sent: Saturday, March 23, 2013 8:48 AM
> To: DrakeRadio@yahoogroups.com

> Subject: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester
>
> Good Day All,
>
> Does anyone else have one of these excellent testers in the shack...?
>
> If so, is there any chance that yours may include the testing settings /
> parameters for relatively newer compactron tubes, such as the 6T9, 6U10,
> etc. etc.?
>
> Many thanks!
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
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Yahoo! Groups Links

12795. Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 16:48:25 UTC
From: Eddy Swynar
Topic: 12779 Message: 12795

Hi Peter,

If you DO need the info, just give me the word---the date on the roll is 1971, which is far newer than the original roll on my tester...

It consists of some 17 separate pages, or so.

Just let me know & I'll be only too happy to forward it onto you as an attachment.

BTW, I still use those Drake Twins that I purchased from you several years ago, at the summer cottage. I had to re-build the PTO for the T-4X because of old age affecting the resistor values, & some solder joints that finally died on me. But it was well worth it: the thing runs like a champ, & I learned a lot from the experience. Best of all, it helped me to overcome my fear of rolling up my sleeves, biting the bullet, & dis-assembling the PTO!

~73~ de Eddy VE3CUI - VE3XZ

On 2013-03-24, at 12:27 PM, VE3AX/7 wrote:

> Great news Eddie. I'll still check out what I have though and let you know.
> Perhaps I need that info as well myself.
>
> 73
>
> Peter
> VE3AX/7
>
> -----Original Message-----
> From: Eddy Swynar
> Sent: Sunday, March 24, 2013 9:01 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester
>
> Hi Peter,
>
> Stop the presses...! Hi Hi
>
> I just received all the info that I needed, so save yourself the work...many
> thanks for all your efforts...!
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
> On 2013-03-23, at 4:11 PM, VE3AX/7 wrote:
>
> > Eddy:
> >

> > I have one of those ? came across it at a very attractive price last
> > summer. Not at home until tomorrow evening but will check and see ? it?s
> > the one with the compactron adapters so should have the data as well. LOTS
> > of switches on that tester, aren?t there!
> >
> > Not sure what to do with the 9-66 now ? offered to help an 80 year old
> > remove his towers and antennas last week and he wouldn?t let me leave
> > without taking his TV-7C/u tube tester, along with a National NC-125 and a
> > Trio 9R-4!
> >
> > Back to you late tomorrow evening.
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> > Peter
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> > From: Eddy Swynar
> > Sent: Saturday, March 23, 2013 8:48 AM
> > To: DrakeRadio@yahoogroups.com
> > Subject: [DrakeRadio] "STARK"-Brand 9-66 Dynamic Tube Tester
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> > Good Day All,
> >
> > Does anyone else have one of these excellent testers in the shack...?
> >
> > If so, is there any chance that yours may include the testing settings /
> > parameters for relatively newer compactron tubes, such as the 6T9, 6U10,
> > etc. etc.?
> >
> > Many thanks!
> >
> > ~73~ de Eddy VE3CUI - VE3XZ
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12796. Re: [DrakeRadio] Re: TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 17:44:10 UTC
From: k3xr@...
Topic: 12786 Message: 12796

The CWrit I picked up was local from a gal, who got her ticket when she was a teenager, purchased new, used a couple years, and stored in the attic, just a lucky find. DAN, K3XR

http://home.comcast.net/~k3xr/

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, March 24, 2013 11:24:39 AM
Subject: [DrakeRadio] Re: TR-4Cw completed

I purchased a TR-4CW with RIT about 10years ago as a project radio and then ham radio fell by the wayside. The person I purchased the rig from stored in a very wet environment, the chassis has a great deal of rust. Upon inspection, there have been a bunch of unknown modifications, a real hack job. Someone painted the tube covers black and put a real crappy black paint job on it. Some day, I will revisit the idea of refurbishing the rig but its going to take an act of god to get it going.

I would love to get that one going, that would be a real accomplishment.

Doug

--- In DrakeRadio@yahoogroups.com , k3xr@... wrote:
>
> Great job Doug...I recently completed restoring a TR-CWrit, love the rig, photos on my QRZ page. Regards, DAN K3XR
>
>
> http://home.comcast.net/~k3xr/
>
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, March 24, 2013 10:57:07 AM
> Subject: [DrakeRadio] Re: TR-4Cw completed
>
>
>
>
>
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>
>
>
> --- In DrakeRadio@yahoogroups.com , "slowcountry1" <dcoffman@> wrote:

> >
> > The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).
> >
> > Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.
> >
> > Two days ago, I proceeded with the rest of the alignment process. Most everything was already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.
> >
> > Yesterday, I completed the work by cleaning the chassis top. I attempted to remove the old cigarette scum with toothbrushes and distilled water. Unfortunately, the chassis lettering vaporized but the scum did not. I was able to remove all of the grime with 409 household cleaner and a tooth brush. Aluminum cleaner was used on the SSB filter tops, connecting rods to the front panel and the three tube covers. Everything looks quite beautiful. There is however some minor discoloration / or possibly corrosion in a few places. I did not attempt to clean the bottom of the chassis.
> >
> > I have a source for new light bulb and blue filter material. The covers will be going back on the rig within the next couple of days, hopefully and will actually signify its completion.
> >
> > If one were to compare this rig to a brand new factory unit, I would suspect the grade would be 8 out of 10. I am extremely happy to have the unit back at full tilt, not only because I absolutely enjoy operating it, but the fact that it was left to me by my deceased grandfather 10+ years ago.
> >
> > Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.
> >
> > Through the help of those on this list, I have gained quite a bit of experience and confidence working with this gear. I wish to express my gratitude to those people who maintain, contribute and moderate the list and for the willingness to help a fellow ham. To anyone attempting a repair or restoration, Garey's CD's are an invaluable tool and in my opinion, a must.
> >
> > Thanks to all,
> >
> > Doug Coffman
> > N9XTF
> >
>
> For prosperity sake, I uploaded some before and after chassis photos.
>
>

>
>
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12797. Repasir Help Wanted Drake Elmer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 17:40:05 UTC
From: aa8p_ralph
Topic: 12797 Message: 12797

Wanted Drake Elmer

I am looking for a Drake Elmer, Someone who lives in the Dayton - Columbus, Ohio area who would be willing to Elmer me on testing and repair of Drake C Line series radios. I don't have the equipment or knowledge to do this myself and maybe I am too old to learn, but I will give it my best effort. I would be willing to compensate my Elmer for the time spent teaching / repairing the equipment. Please email or call 937-215-1456 if you are willing to help.
Thank you and 73,
Ralph AA8P

12798. Re: [DrakeRadio] Repasir Help Wanted Drake Elmer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 18:19:05 UTC
From: Richard Knoppow
Topic: 12797 Message: 12798

----- Original Message -----
From: "aa8p_ralph" <rpamer@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, March 24, 2013 10:40 AM
Subject: [DrakeRadio] Repasir Help Wanted Drake Elmer

> Wanted Drake Elmer
>
> I am looking for a Drake Elmer, Someone who lives in the
> Dayton - Columbus, Ohio area who would be willing to Elmer
> me on testing and repair of Drake C Line series radios. I
> don't have the equipment or knowledge to do this myself
> and maybe I am too old to learn, but I will give it my
> best effort. I would be willing to compensate my Elmer
> for the time spent teaching / repairing the equipment.
> Please email or call 937-215-1456 if you are willing to
> help.
> Thank you and 73,
> Ralph AA8P
>
First thing is to get the CD offered by Garey Barrell
of this list
www.k4oah.com
It has complete, high quality, PDF's of the factory
service manuals plus a manual put together by Garrey with
photos and other stuff the factory manuals do not have.
Even if you find someone to help out the material in
the disc will make life easier.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12799. Potentiometer TR4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 18:39:31 UTC
From: Radio Vintage
Topic: 12799 Message: 12799

HI

Help me , for Potentiometer TR4c (rcvr gain - rf - power)
The
problem of the potentiometer, is as follows:
A part of Stick it carbon (part Audio 500k log.) is consumed, is interrupted.

I would like to replace the audio portion of potenziometer, which today is
the potentiometer (make and model) where to get the part to replace, (size and
characteristics)

Best regards

Bye Frank

[Non-text portions of this message have been removed]

12800. Re: [DrakeRadio] T-4 Reciter woes...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-24 21:59:21 UTC
From: Mike Bryce
Topic: 12784 Message: 12800

Garey,

I was up till almost four am working on this transmitter.

Here's what else I've observed.

with the R4a connected (injection) there is no 40 meter (or any other band) output, only the 5.64 and doubled freq.

yes, there is injection from the R4A

Now, all of a sudden, the thing started to work. But the RF tune control is very, very, very touchy.

Then I'd get no output, a little bit, and then full power. 20 meters is low, only 50ish watts, and 15 meter almost nothing, while I can't see to nudge 10 meters at all.

80 seems to produce power, about 125ish watts.

I've done the usual stuff, cleaned the connections, tube sockets, swapped tubes and so on and I am still scratching my head

mike, wb8vge

On Sun, Mar 24, 2013 at 11:54 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Mike -
>
> I just re-read your post, and this is probably just a bit different.
> Since V1 is out, V2 must be oscillating on it's own. It is just a
> buffer amp, and with no drive it could very well oscillate. I assume
> the frequency is not 'exactly' 5.645 MHz!
>
> Again, not likely a real problem, just an anomaly for a stage that is
> sitting there with no drive.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

> qrper wrote:
> > All right boys and girls, I have a strange one on the bench.
> >
> > It's the rather rare Drake T-4 reciter.
> >
> > here's the problem
> >
> > With NO injection from any receiver (the T4 has NO vfo)
> >
> > I'm producing 140+ watts
> >
> > Only it's on 5.64 mhz. Yeah, the carrier oscillator freq.
> > And about 140+ watts on 11.3XX, double the carrier freq.
> >
> > Transmitter gain at zero, 140 watts out on those two freq. So, yeah,
> something is singing and passing the carrier freq.
> >
> > so, Pulled the 12ax7 V1, and with NO tube in the oscillator circuit,
> whoa! 140+ watts out.
> >
> > If I take my oscope probe or the meter probe and touch pin 5 of the
> 12ba6 just out of the balanced modulator, the output goes to zero. Just
> touch it!!! that's all and NO rf output.
> >
> > of course I've swapped in known good tubes, and no joy.
> >
> > Tested all tube
> >
> > Volages at the tubes seem to be within reason.
> >
> > This one has me scratching my head...
> >
> > anyone?
> >
> > Mike, wb8vge
> >
> >
>
>
>

--
Mike, WB8VGE
SunLight Energy Systems
The Heathkit Shop
http://www.theheathkitshop.com/

J e e p
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12801. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 01:32:40 UTC
From: Bob Salmon
Topic: 12774 Message: 12801

Hi. I wrote about a week ago. I'm going to send you some photos of my 2 T4X's. do you want the serial numbers? Do you any PS or speakers? I'm looking to get into SDR now. An abrupt change from tubes , I know.
Thanks for your time.
Bob
N3JQD

Sent from my iPad

On Mar 23, 2013, at 4:40 PM, "yash@..." <yash@...> wrote:

> Mike
> would like to see a coupla of pictures of the C.
> thanks
> dale wt4t
>
> -----Original Message-----
> From: Michael Shelly <wb2kki@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sat, Mar 23, 2013 10:02 am
> Subject: Re: [DrakeRadio] looking for t4x transmitter
>
> I have a nice tx4c works great is very clean just has a small scatch on front. Will sell $350.00 plus shipping. E-mail me off site and I'll send pics.
>
> Mike
> WB2KKI
>
> >_____
> >From: "yash@...@...>
> >To: DrakeRadio@yahoogroups.com
> >Sent: Saturday, March 23, 2013 9:51 AM
> >Subject: [DrakeRadio] looking for t4x transmitter
> >
> >
> >Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
> >THANKS
> >DALE WT4T
> >
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> [Non-text portions of this message have been removed]

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> [Non-text portions of this message have been removed]
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> ---
> 1 Tip to Burn 12Ibs a Month
> Famous TV Doctor Discusses This Shocking Weight loss Discovery.
> DailyHealthConsumer.com

OVERSTOCK ipads: $30.93
Get 32GB Apple iPad for as low as $30.93. Limit 1.Day. Grab yours Now!
http://thirdpartyoffers.juno.com/TGL3141/514fa936b0bff293623f2st01duc

[Non-text portions of this message have been removed]

12802. Re: [DrakeRadio] T-4 Reciter woes...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 02:47:58 UTC
From: Garey Barrell
Topic: 12784 Message: 12802

Mike -

Well the R-4A should be sending over 12.645 MHz with the PTO at '000' on 40M. Obviously mixed with the 5.645 MHz CO produces 7.000 MHz. I imagine the 'touchy' RF tune is because something is still oscillating. You DID put V1 back in, right?!?! :-)

Is the RF TUNE peaking where it 'should' be for 40M? I wonder if someone has been 'fixing' the front end slugs??

I think they were adjustable in the T-4, unlike the later transmitters. They are all at the same height as in the later ones. Caution though, IF they ARE glyptal sealed, don't adjust them.

I would verify that the three signals are present and getting to the Mixer (V3) stage. If they are, you WILL get 7.000 MHz output.

The A-Line (Early) CD has an early manual which has alignment information for both the T-4 and the T-4X.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mike Bryce wrote:
> Garey,
>
> I was up till almost four am working on this transmitter.
>
> Here's what else I've observed.
>
> with the R4a connected (injection) there is no 40 meter (or any other band)
> output, only the 5.64 and doubled freq.
>
> yes, there is injection from the R4A
>
> Now, all of a sudden, the thing started to work. But the RF tune control is
> very, very, very touchy.
>
> Then I'd get no output, a little bit, and then full power. 20 meters is
> low, only 50ish watts, and 15 meter almost nothing, while I can't see to
> nudge 10 meters at all.
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> 80 seems to produce power, about 125ish watts.

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> I've done the usual stuff, cleaned the connections, tube sockets, swapped
> tubes and so on and I am still scratching my head
>
> mike, wb8vge
>
>
> On Sun, Mar 24, 2013 at 11:54 AM, Garey Barrell <k4oah@...>wrote:
>
>> **
>>
>>
>> Mike -
>>
>> I just re-read your post, and this is probably just a bit different.
>> Since V1 is out, V2 must be oscillating on it's own. It is just a
>> buffer amp, and with no drive it could very well oscillate. I assume
>> the frequency is not 'exactly' 5.645 MHz!
>>
>> Again, not likely a real problem, just an anomaly for a stage that is
>> sitting there with no drive.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> qrper wrote:
>>> All right boys and girls, I have a strange one on the bench.
>>>
>>> It's the rather rare Drake T-4 reciter.
>>>
>>> here's the problem
>>>
>>> With NO injection from any receiver (the T4 has NO vfo)
>>>
>>> I'm producing 140+ watts
>>>
>>> Only it's on 5.64 mhz. Yeah, the carrier oscillator freq.
>>> And about 140+ watts on 11.3XX, double the carrier freq.
>>>
>>> Transmitter gain at zero, 140 watts out on those two freq. So, yeah,
>> something is singing and passing the carrier freq.
>>> so, Pulled the 12ax7 V1, and with NO tube in the oscillator circuit,
>> whoa! 140+ watts out.
>>> If I take my oscope probe or the meter probe and touch pin 5 of the
>> 12ba6 just out of the balanced modulator, the output goes to zero. Just

>> touch it!!! that's all and NO rf output.
>>> of course I've swapped in known good tubes, and no joy.
>>>
>>> Tested all tube
>>>
>>> Volages at the tubes seem to be within reason.
>>>
>>> This one has me scratching my head...
>>>
>>> anyone?
>>>
>>> Mike, wb8vge
>>>
>>>
>>
>>
>
>

12803. RE: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 03:01:10 UTC
From: Rich Arland
Topic: 12722 Message: 12803

Cool idea, Tnx/

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: http://commobunker.blogspot.com/

("RED Noogie" Guru)

To: DrakeRadio@yahoogroups.com
From: JOHNQRZ@...
Date: Thu, 21 Mar 2013 12:54:31 -0400
Subject: Re: [DrakeRadio] Schematic Help

Take them to your local blueprint shop, they can make them what ever size

you want. I have blown up schematics in the past to 24x36 and put them on

the wall over my bench....

In a message dated 3/20/2013 6:07:08 P.M. Pacific Daylight Time,

k7sz@... writes:

I'm hitting up all three of my "boatanchor-type" lists in hopes someone has

already done what I need to do and I won't have to reinvent the wheel.

Schematic diagrams: How does one take a small, in some cases a couple of

pages out of a manual, enlarge them and put them together to obtain one,

large schematic with no seams that and old phart (like me) can actually read!

My first thought was to hit Stapes or Office Max and have them take the

two piece schematic from the HQ-110 and make a larger version.

Then I thought about a photo program like PhotoShop, Elements, NX-2, etc.

So, anyone on these lists have any experience/background doing somethng

similar to this??

Rich Arland, K7SZ

Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP"

(4th ed)

BLOG: _http://commobunker.blogspot.com/_ (http://commobunker.blogspot.com/)

("RED Noogie" Guru)

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12805. TR7 audio response?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 05:35:47 UTC
From: ka8asn
Topic: 12805 Message: 12805

I was wondering about changing out the 2.3 khz filter for better audio response. Or any modifications that can be made to the audio board. I want to eliminate or reduce the hiss and have the 2nd version board installed now.

Thanks Mike

12806. Re: [DrakeRadio] Re: TR-4Cw completed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 12:04:32 UTC
From: n9jcq
Topic: 12786 Message: 12806

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------
From: k3xr@...
Date: 03/24/2013 10:10 AM (GMT-06:00)
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: TR-4Cw completed

Great job Doug...I recently completed restoring a TR-CWrit, love the rig, photos on my QRZ page. Regards, DAN K3XR

http://home.comcast.net/~k3xr/

----- Original Message -----
From: "slowcountry1" <dcoffman@pdswireless.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, March 24, 2013 10:57:07 AM
Subject: [DrakeRadio] Re: TR-4Cw completed

--- In DrakeRadio@yahoogroups.com , "slowcountry1" <dcoffman@...> wrote:
>
> The purpose for this email is to offer a huge thanks to those that helped me return my TR-4Cw to full, consistent and stable operation. (Knock on wood).
>
> Early last week I aligned the oscillator responsible for the operation of the band crystals. There was significant adjustments required to obtain the required negative voltage which resulted in stabilizing the 10M crystals. Following this alignment, there has been no further drift in the transmit frequency. A couple of days following this alignment, I also reversed the cooling fan to withdraw heat from the PA area as suggested.
>
> Two days ago, I proceeded with the rest of the alignment process. Most everything was already set, only a couple of small tweaks were required. This seems pretty good for a 30+ year old rig.
>
> Yesterday, I completed the work by cleaning the chassis top. I attempted to remove the old cigarette scum with toothbrushes and distilled water. Unfortunately, the chassis lettering vaporized but the scum did not. I was able to remove all of the grime with 409 household cleaner and a tooth brush. Aluminum cleaner was used on the SSB filter tops, connecting rods to the front panel and the three tube covers. Everything looks quite beautiful. There is however some minor discoloration / or possibly corrosion in a few places. I did not attempt to clean the bottom of the chassis.
>
> I have a source for new light bulb and blue filter material. The covers will be going back on the rig within the next couple of days, hopefully and will actually signify its completion.
>

> If one were to compare this rig to a brand new factory unit, I would suspect the grade would be 8 out of 10. I am extremely happy to have the unit back at full tilt, not only because I absolutely enjoy operating it, but the fact that it was left to me by my deceased grandfather 10+ years ago.
>
> Once the covers are reinstalled and the unit is put into its permanent place, I will start the process on my TR-6. I have two older TR-4s, that I purchased 8 years ago with known problems, those will follow.
>
> Through the help of those on this list, I have gained quite a bit of experience and confidence working with this gear. I wish to express my gratitude to those people who maintain, contribute and moderate the list and for the willingness to help a fellow ham. To anyone attempting a repair or restoration, Garey's CD's are an invaluable tool and in my opinion, a must.
>
> Thanks to all,
>
> Doug Coffman
> N9XTF
>

For prosperity sake, I uploaded some before and after chassis photos.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12807. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 13:11:56 UTC
From: yash@aol.com
Topic: 12774 Message: 12807

Bob
as long as the rigs are decent, don't care a lot about sn#'s have manuals for all the drakes from Garey. I have several supplies also. I got into SDR 8 years ago with a kit sdr-1000 went up to a 5000 and ended up running a 1500 with a amp, but mostly QRP. that with my heath twins, ft-1000d and a few other old rigs ,balances out well. I still have a beautiful r4b and want to put the drake line back on the air ,if I can find a decent transmitter.
thanks
dale wt4t

-----Original Message-----
From: Bob Salmon <bobsalmon@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, Mar 24, 2013 9:32 pm
Subject: Re: [DrakeRadio] looking for t4x transmitter

Hi. I wrote about a week ago. I'm going to send you some photos of my 2 T4X's. do you want the serial numbers? Do you any PS or speakers? I'm looking to get into SDR now. An abrupt change from tubes , I know.
Thanks for your time.
Bob
N3JQD

Sent from my iPad

On Mar 23, 2013, at 4:40 PM, "yash@...@...> wrote:

> Mike
> would like to see a coupla of pictures of the C.
> thanks
> dale wt4t
>
> -----Original Message-----
> From: Michael Shelly <wb2kki@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sat, Mar 23, 2013 10:02 am
> Subject: Re: [DrakeRadio] looking for t4x transmitter
>
> I have a nice tx4c works great is very clean just has a small scatch on front. Will sell $350.00 plus shipping. E-mail me off site and I'll send pics.
>
> Mike
> WB2KKI
>
> >_____
> >From: "yash@...@...>

> >To: DrakeRadio@yahoogroups.com
> >Sent: Saturday, March 23, 2013 9:51 AM
> >Subject: [DrakeRadio] looking for t4x transmitter
> >
> >
> >Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
> >THANKS
> >DALE WT4T
> >
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> [Non-text portions of this message have been removed]
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> --
> 1 Tip to Burn 12Ibs a Month
> Famous TV Doctor Discusses This Shocking Weight loss Discovery.
> DailyHealthConsumer.com

OVERSTOCK ipads: $30.93
Get 32GB Apple iPad for as low as $30.93. Limit 1.Day. Grab yours Now!
http://thirdpartyoffers.juno.com/TGL3141/514fa936b0bff293623f2st01duc

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12808. Re: [DrakeRadio] exchanging the 2.3 kc ssb filter for better audio?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 13:14:32 UTC
From: Keith Evans
Topic: 12808 Message: 12808

If the TR7 is set up correctly, the Audio is fine both on TX and RX.
73
Keith G3VKW

----- Original Message -----
From: ka8asn
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 5:29 AM
Subject: [DrakeRadio] exchanging the 2.3 kc ssb filter for better audio?

Has any body had any experience doing this and what were the results? Any suggestion for better audio response?

[Non-text portions of this message have been removed]

12809. Re: [DrakeRadio] Schematic Help

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 13:26:46 UTC
From: Garey Barrell
Topic: 12722 Message: 12809

Most of the 'Office' (FedExOffice, etc.) can do as well.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Rich Arland wrote:
> Cool idea, Tnx/
>
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
> BLOG: http://commobunker.blogspot.com/
>
> ("RED Noogie" Guru)
>
>
> To: DrakeRadio@yahoogroups.com
> From: JOHNQRZ@...
> Date: Thu, 21 Mar 2013 12:54:31 -0400
> Subject: Re: [DrakeRadio] Schematic Help
>
>
> Take them to your local blueprint shop, they can make them what ever size
>
> you want. I have blown up schematics in the past to 24x36 and put them on
>
> the wall over my bench....
>
>

12810. RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 13:30:40 UTC
From: Bernie
Topic: 12810 Message: 12810

Hi all,
Sometime back, I think it was this Drake list that had an individual that had some RG62/AU available in short pieces to be used as jumpers between transmitters and receivers to run transceive. I am looking for a chunk about 60 inches long with which to make two jumpers - 28 inches long with RCA plugs on both ends on each cable (or without 'cause I have the RCA plugs here.
I just don't want to have to buy 100 feet for a special application. Please contact me off list if you wish: barcand@...

73
Bernie in ND
WD0GMD

[Non-text portions of this message have been removed]

12811. Re: [DrakeRadio] RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:09:05 UTC
From: Bob Macklin
Topic: 12810 Message: 12811

You can buy short lengths of RG-62 from Surplus Sales of Nebraska.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Bernie
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 6:30 AM
Subject: [DrakeRadio] RG62/AU coax

Hi all,
Sometime back, I think it was this Drake list that had an individual that had some RG62/AU available in short pieces to be used as jumpers between transmitters and receivers to run transceive. I am looking for a chunk about 60 inches long with which to make two jumpers - 28 inches long with RCA plugs on both ends on each cable (or without 'cause I have the RCA plugs here.
I just don't want to have to buy 100 feet for a special application. Please contact me off list if you wish: barcand@...

73
Bernie in ND
WD0GMD

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[Non-text portions of this message have been removed]

12812. Re: [DrakeRadio] RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:10:06 UTC
From: Bernie
Topic: 12810 Message: 12812

Thanks, Bob. 73
Bernie in ND
WD0GMD

----- Original Message -----
From: Bob Macklin
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 9:09 AM
Subject: Re: [DrakeRadio] RG62/AU coax

You can buy short lengths of RG-62 from Surplus Sales of Nebraska.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Bernie
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 6:30 AM
Subject: [DrakeRadio] RG62/AU coax

Hi all,
Sometime back, I think it was this Drake list that had an individual that had some RG62/AU available in short pieces to be used as jumpers between transmitters and receivers to run transceive. I am looking for a chunk about 60 inches long with which to make two jumpers - 28 inches long with RCA plugs on both ends on each cable (or without 'cause I have the RCA plugs here.
I just don't want to have to buy 100 feet for a special application. Please contact me off list if you wish: barcand@...

73
Bernie in ND
WD0GMD

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12813. Re: [DrakeRadio] RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:12:36 UTC
From: Edward
Topic: 12810 Message: 12813

Just bought some on EBay. Search for Drake cables

Sent from my iPhone

On Mar 25, 2013, at 16:30, "Bernie" <barcand@...> wrote:

> Hi all,
> Sometime back, I think it was this Drake list that had an individual that had some RG62/AU available in short pieces to be used as jumpers between transmitters and receivers to run transceive. I am looking for a chunk about 60 inches long with which to make two jumpers - 28 inches long with RCA plugs on both ends on each cable (or without 'cause I have the RCA plugs here.
> I just don't want to have to buy 100 feet for a special application. Please contact me off list if you wish: barcand@...
>
> 73
> Bernie in ND
> WD0GMD
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12814. Re: [DrakeRadio] RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:14:57 UTC
From: k3xr@...
Topic: 12810 Message: 12814

Have found 62/AU cable on Ebay, some with various types of connectors but if you only require short pieces just cut off the connectors go from there. I look for the quality stuff Belden etc. DAN K3XR

http://home.comcast.net/~k3xr/

----- Original Message -----
From: "Bernie" <barcand@...m>
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 10:10:06 AM
Subject: Re: [DrakeRadio] RG62/AU coax

Thanks, Bob. 73
Bernie in ND
WD0GMD

----- Original Message -----
From: Bob Macklin
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 9:09 AM
Subject: Re: [DrakeRadio] RG62/AU coax

You can buy short lengths of RG-62 from Surplus Sales of Nebraska.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Bernie
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 6:30 AM
Subject: [DrakeRadio] RG62/AU coax

Hi all,
Sometime back, I think it was this Drake list that had an individual that had some RG62/AU available in short pieces to be used as jumpers between transmitters and receivers to run transceive. I am looking for a chunk about 60 inches long with which to make two jumpers - 28 inches long with RCA plugs on both ends on each cable (or without 'cause I have the RCA plugs here.
I just don't want to have to buy 100 feet for a special application. Please contact me off list if you wish: barcand@...

73
Bernie in ND
WD0GMD

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12815. Re: [DrakeRadio] RG62/AU coax

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:18:03 UTC
From: Paul Kraemer
Topic: 12810 Message: 12815

I can probably come up with that Bernie
I know I have 240 ft left of the spool of 8421 I bought recently
Paul K0UYA
----- Original Message -----
From: "Bernie" <barcand@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 8:30 AM
Subject: [DrakeRadio] RG62/AU coax

> Hi all,
> Sometime back, I think it was this Drake list that had an individual that
> had some RG62/AU available in short pieces to be used as jumpers between
> transmitters and receivers to run transceive. I am looking for a chunk
> about 60 inches long with which to make two jumpers - 28 inches long with
> RCA plugs on both ends on each cable (or without 'cause I have the RCA
> plugs here.
> I just don't want to have to buy 100 feet for a special application.
> Please contact me off list if you wish: barcand@...
>
> 73
> Bernie in ND
> WD0GMD
>
> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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>
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12816. Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:23:41 UTC
From: Al Schichler
Topic: 12713 Message: 12816

I found a few tools that worked, including ones with a recessed blade.
The one that just had a slot at one end seemed to work the best, so I
used that.
Adjustment was easy using an oscilloscope set to a sensitive DC voltage
range and the tweaker with a small slot at the end.

-Al

12817. Re: [DrakeRadio] Re: R-4A Passband tuner slugs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 14:33:05 UTC
From: Steve Wedge
Topic: 12713 Message: 12817

The scope makes it really easy, doesn't it?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Al Schichler
Sent: Monday, March 25, 2013 10:23 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R-4A Passband tuner slugs

I found a few tools that worked, including ones with a recessed blade.
The one that just had a slot at one end seemed to work the best, so I
used that.
Adjustment was easy using an oscilloscope set to a sensitive DC voltage
range and the tweaker with a small slot at the end.

-Al

[Non-text portions of this message have been removed]

12818. Re: [DrakeRadio] exchanging the 2.3 kc ssb filter for better audio?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 16:38:01 UTC
From: Jim Shorney
Topic: 12808 Message: 12818

I would concur with Keith's reply. However, the original question was not specific as to which response - TX, RX, or both. The TR-7 has stellar TX audio as-is. A modification has been developed to switch in the AM IF filter on AM transmit, so the same thing could be done with a wider SSB filter as an option for both TX and RX. Or, the "stock" SSB filter could simply be replaced with a wider SSB filter, if you can find (or build) one.

I you are just looking for wider RX response, there are some modifications published on the internet to imrpove the bandwidth of the audio stages. I think some mods for the TX audio may exist as well, but most people seem happy with the TX audio as-is. You can also use the optional 4 KHz or 6 KHz AM IF filters for wider response on SSB RX. I would not sub in a 4 KHz (or 6 KHz) IF filter for SSB transmit, that would consume a little more bandwidth than would be considered courteous to your fellow hams.

73

-Jim
NU0C

On Mon, 25 Mar 2013 13:14:32 +0000, Keith Evans wrote:

>If the TR7 is set up correctly, the Audio is fine both on TX and RX.
>73
>Keith G3VKW
>
>
> ----- Original Message -----
> From: ka8asn
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, March 25, 2013 5:29 AM
> Subject: [DrakeRadio] exchanging the 2.3 kc ssb filter for better audio?
>
>
>
>
> Has any body had any experience doing this and what were the results? Any suggestion for better audio response?
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12819. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 16:57:34 UTC
From: bobsalmon@juno.com
Topic: 12774 Message: 12819

Dale,

Thanks for your response. I am at work now, but, will send photos this evening. If you want I will also send a short video of me transmitting. You'll be able to see the power output, etc.....

I'm using a D-104 (read: Dee, Ten,Four) and / or a Shure 444. Do you need a mic also?

I will email you before listing these on QRZ

Bob
N3JQD

_____
Fast, Secure, NetZero 4G Mobile Broadband. Try it.
http://www.netzero.net/?refcd=NZINTISP0512T4GOUT2

12820. enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:14:39 UTC
From: David Winfree
Topic: 12820 Message: 12820

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

12821. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:15:39 UTC
From: yash@aol.com
Topic: 12774 Message: 12821

Bob
all I need is the transmitter, no supply or mic.
thanks
dale wt4t

-----Original Message-----
From: bobsalmon <bobsalmon@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Mar 25, 2013 12:59 pm
Subject: Re: [DrakeRadio] looking for t4x transmitter

Dale,

Thanks for your response. I am at work now, but, will send photos this evening.
If you want I will also send a short video of me transmitting. You'll be able
to see the power output, etc.....

I'm using a D-104 (read: Dee, Ten,Four) and / or a Shure 444. Do you need a mic
also?

I will email you before listing these on QRZ

Bob
N3JQD

____
Fast, Secure, NetZero 4G Mobile Broadband. Try it.
http://www.netzero.net/?refcd=NZINTISP0512T4GOUT2

Yahoo! Groups Links

[Non-text portions of this message have been removed]

12822. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:19:36 UTC
From: Eddy Swynar
Topic: 12820 Message: 12822

On 2013-03-25, at 1:14 PM, David Winfree wrote:

> Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
>
>

[Non-text portions of this message have been removed]

12823. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:20:35 UTC
From: Al Parker
Topic: 12820 Message: 12823

Hi David,
I usually use a tapered reamer. I have 2 or 3, with different tapers, they're either Tee handled or with a hole thru which you can slip a round shafted screwdriver to use to turn it. I don't know where they might be available nowadays, I've had them for a long time. I'm sure a google or similar search will turn something up.
There's sometimes limited space behind the back of the chassis, so you have to watch out for interference with wires or components.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 3/25/2013 1:14 PM, David Winfree wrote:
> Lots of folks retrofit 3 wire line cords in older equipment, originally
> coming with 2 wire cordsets. Since the metalwork would normally involve
> built-up gear, what is a good way to enlarge an existing "double D" hole
> to the next size up? Not many of us would pop for the $200 greenlee
> punch, so what is second best? Nibbler, filing, etc??
>
>

12824. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:37:02 UTC
From: Bob Macklin
Topic: 12820 Message: 12824

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

[Non-text portions of this message have been removed]

12825. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 17:52:39 UTC
From: w7fe
Topic: 12820 Message: 12825

Yup. Tapered reamer or appropriately sized round punch followed by nibbling
and filing. Tedious, but worthwhile.

W7FE
----- Original Message -----
From: "David Winfree" <dmw11038@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

> Lots of folks retrofit 3 wire line cords in older equipment, originally
> coming with 2 wire cordsets. Since the metalwork would normally involve
> built-up gear, what is a good way to enlarge an existing "double D" hole
> to the next size up? Not many of us would pop for the $200 greenlee
> punch, so what is second best? Nibbler, filing, etc??
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> Yahoo! Groups Links
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12826. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:14:55 UTC
From: Chgypsy@...
Topic: 12820 Message: 12826

dmw11038@... writes:

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
Grommet the hole if possible and use a doubled over zip tie on the inside. Your cord doesn't move around much. If you can't grommet then I have used the shrink tape on the cord at the pass through point.
Carl wd8nhk

[Non-text portions of this message have been removed]

12827. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:16:12 UTC
From: Steve Wedge
Topic: 12820 Message: 12827

For the receivers, you may be able to find a suitably small cross-section cord that will work in the existing hole, with a different grommet. There are fairly flat power cords that are rated for lower power that would work here. Since the 4-Line receivers only use less than 100W, you'd still be well within the ratings of the smaller line cords.

Something like this would work with a standard rubber grommet and would make it so you wouldn't have to cut up the chassis:

http://www.allelectronics.com/make-a-store/item/LCAC-303/3-BLACK-18/3-IEC-DETACHABLE-POWER-CORD/1.html

This is 0.26" OD.

I've seen a number of laptop power cords that are smaller than this.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: David Winfree
Sent: Monday, March 25, 2013 1:14 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

[Non-text portions of this message have been removed]

12828. RE: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:33:09 UTC
From: Terrell Hamilton
Topic: 12820 Message: 12828

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

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[Non-text portions of this message have been removed]

12829. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:35:39 UTC
From: Garey Barrell
Topic: 12820 Message: 12829

David -

Several have suggested 'taperedreamer'. That usually refers to a pipe reamer, which is much larger. I think they are referring to a 'T-Handle Reamer' which goes from about 3/16" up to 1/2". Typically around $10-15 most hardware places.

Easiest is to enlarge to rubber grommet size, otherwise lots of filing.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

David Winfree wrote:
> Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
>
>

12830. RE: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:36:50 UTC
From: Terrell Hamilton
Topic: 12820 Message: 12830

There are also those doohickeys (sort of like red noogies..) that are called either strain relief, or line stress relief (I forget...everything). They are like a split grommet that snap together as they are inserted into the hole, and grab onto the line cord with quite a bit of strength.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Chgypsy@...
Sent: Monday, March 25, 2013 11:15 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

dmw11038@... <mailto:dmw11038%40gmail.com> writes:

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the
next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
Grommet the hole if possible and use a doubled over zip tie on the inside. Your cord doesn't move around much. If you can't grommet then I have

used the shrink tape on the cord at the pass through point.
Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12831. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:36:58 UTC
From: vacuuminded2@...
Topic: 12820 Message: 12831

One of those stepped drill bits made for expanding holes in sheet metal- looks like a Christmas tree. If the hole has a flat spot on one side, you will need to file or ream it out to a round hole before using the bit.

The double zip tie thing is functional, but hoakey. Get the correct size Heyco strain relief for the cord you intend to use, make the appropriate size hole, and pop it in. Pliers work, however there is a special tool made for them which works slicker than snot. A heck of a lot more professional looking.

GL

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Mar 25, 2013, at 12:14 PM, "David Winfree" <dmw11038@...> wrote:

> Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
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>

[Non-text portions of this message have been removed]

12832. Re: enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 18:32:40 UTC
From: Bill Breeden - NA5DX
Topic: 12820 Message: 12832

David,

I use a Heyco strain relief that works equally well in a "double D" or round hole. When I need a bigger hole, as I have with several pieces of Drake 4 line gear, I drill the hole out to the 1/2 inch size required for the strain relief with a regular 1/2 inch bit and my variable speed drill at slow speed. It usually takes less than a minute to enlarge the hole and the Drakes I have done that way all look they were born with a three wire cord.

73,

Bill - NA5DX

--- In DrakeRadio@yahoogroups.com, "David Winfree" <dmw11038@...> wrote:
>
> Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
>

12833. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 19:06:53 UTC
From: Paul Kraemer
Topic: 12820 Message: 12833

Cords I have been using will fit the existing bushing with only a little trimming of the inside of the bushing, the part that compresses against the cord, not the diameter. I have small diameter 18 gauge black cords round and flat to choose from
Paul K0UYA
----- Original Message -----
From: "David Winfree" <dmw11038@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 12:14 PM
Subject: [DrakeRadio] enlarging line cord holes in metal

> Lots of folks retrofit 3 wire line cords in older equipment, originally
> coming with 2 wire cordsets. Since the metalwork would normally involve
> built-up gear, what is a good way to enlarge an existing "double D" hole
> to the next size up? Not many of us would pop for the $200 greenlee
> punch, so what is second best? Nibbler, filing, etc??
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> Yahoo! Groups Links
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12834. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 19:07:29 UTC
From: Bob Macklin
Topic: 12820 Message: 12834

A MEXICAN MILL is a FILE!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 11:33 AM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

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[Non-text portions of this message have been removed]

12835. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 19:10:16 UTC
From: Bob Macklin
Topic: 12820 Message: 12835

The problem with the tapered reamer is depth. There is often not enough room inside a chassis to use a tapered reamer.

In most cases the best solution is a file.

I bought my tapered reamer at Ace Hardware.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 11:35 AM
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

David -

Several have suggested 'taperedreamer'. That usually refers to a pipe
reamer, which is much larger. I think they are referring to a
'T-Handle Reamer' which goes from about 3/16" up to 1/2". Typically
around $10-15 most hardware places.

Easiest is to enlarge to rubber grommet size, otherwise lots of filing.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

David Winfree wrote:
> Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??
>
>

[Non-text portions of this message have been removed]

12836. RE: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 19:43:19 UTC
From: Terrell Hamilton
Topic: 12820 Message: 12836

AHA! I KNEW those Bastard's (a type of Mexican Mill, I guess...) were good
for SOMETHING!

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 12:07 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

A MEXICAN MILL is a FILE!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 11:33 AM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>

<mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally coming with 2 wire cordsets. Since the metalwork would normally involve built-up gear, what is a good way to enlarge an existing "double D" hole to the next size up? Not many of us would pop for the $200 greenlee punch, so what is second best? Nibbler, filing, etc??

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12837. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 20:10:25 UTC
From: Bob Macklin
Topic: 12820 Message: 12837

About 1960 when I was a young technician fresh out of the USAF I need to make some square holes in a metal box but I did not have a square punch. I DO NOW!).

I asked out machinist how he made the square holes? It can't be done on the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where it was and he reached into his toolbox and handed me a FILE!

TRUE STORY!!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 12:43 PM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

AHA! I KNEW those Bastard's (a type of Mexican Mill, I guess...) were good for SOMETHING!

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 12:07 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

A MEXICAN MILL is a FILE!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 11:33 AM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally
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the next size up? Not many of us would pop for the $200 greenlee punch, so
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[Non-text portions of this message have been removed]

12838. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 20:31:36 UTC
From: Phil Heath/W8XLR
Topic: 12820 Message: 12838

These work great. I use mine quite often...

http://www.amazon.com/Greenlee-30008-Multi-Hole-Step-Bit/dp/B001M0MDHK

73, Phil/W8XLR

From: Bob Macklin
Sent: Monday, March 25, 2013 4:10 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

About 1960 when I was a young technician fresh out of the USAF I need to make some square holes in a metal box but I did not have a square punch. I DO NOW!).

I asked out machinist how he made the square holes? It can't be done on the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where it was and he reached into his toolbox and handed me a FILE!

TRUE STORY!!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Monday, March 25, 2013 12:43 PM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

AHA! I KNEW those Bastard's (a type of Mexican Mill, I guess...) were good
for SOMETHING!

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 12:07 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

A MEXICAN MILL is a FILE!

Bob Macklin
K5MYJ
Seattle, Wa.

"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 11:33 AM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally
coming with 2 wire cordsets. Since the metalwork would normally involve
built-up gear, what is a good way to enlarge an existing "double D" hole to
the next size up? Not many of us would pop for the $200 greenlee punch, so
what is second best? Nibbler, filing, etc??

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[Non-text portions of this message have been removed]

12839. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 20:47:38 UTC
From: vacuuminded2@...
Topic: 12820 Message: 12839

That's the type of bit I was referencing- they really do work well, about the best way to reliably make or expand holes in thin sheet metal.
There are MUCH less expensive variants available at your local home improvement store that are good enough for this kind of stuff. Still expect to spend over $20 on one though. You won't regret the purchase.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Mar 25, 2013, at 3:31 PM, "Phil Heath/W8XLR" <arclight@...> wrote:

> These work great. I use mine quite often...
>
> http://www.amazon.com/Greenlee-30008-Multi-Hole-Step-Bit/dp/B001M0MDHK
>
> 73, Phil/W8XLR
>
> From: Bob Macklin
> Sent: Monday, March 25, 2013 4:10 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
> About 1960 when I was a young technician fresh out of the USAF I need to make some square holes in a metal box but I did not have a square punch. I DO NOW!).
>
> I asked out machinist how he made the square holes? It can't be done on the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where it was and he reached into his toolbox and handed me a FILE!
>
> TRUE STORY!!
>
> Bob Macklin
> K5MYJ
> Seattle, Wa.
> "Real Radios Glow In The Dark"
> ----- Original Message -----
> From: Terrell Hamilton
> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Monday, March 25, 2013 12:43 PM
> Subject: RE: [DrakeRadio] enlarging line cord holes in metal
>
> AHA! I KNEW those Bastard's (a type of Mexican Mill, I guess...) were good
> for SOMETHING!
>

> Terry K7WLD
>
> Wenatchee, WA
>
> From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com]
On
> Behalf Of Bob Macklin
> Sent: Monday, March 25, 2013 12:07 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
> A MEXICAN MILL is a FILE!
>
> Bob Macklin
> K5MYJ
> Seattle, Wa.
> "Real Radios Glow In The Dark"
> ----- Original Message -----
> From: Terrell Hamilton
> To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Monday, March 25, 2013 11:33 AM
> Subject: RE: [DrakeRadio] enlarging line cord holes in metal
>
> Bob - Which is what... Dremel tool??
>
> Terry K7WLD
>
> Wenatchee, WA
>
> From: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> [mailto:mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
> On
> Behalf Of Bob Macklin
> Sent: Monday, March 25, 2013 10:37 AM
> To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
> MEXICAN MILL!
>
> Bob Macklin
> K5MYJ
> Seattle, Wa.
> "Real Radios Glow In The Dark"
> ----- Original Message -----
> From: David Winfree
> To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Monday, March 25, 2013 10:14 AM
> Subject: [DrakeRadio] enlarging line cord holes in metal
>

> Lots of folks retrofit 3 wire line cords in older equipment, originally
> coming with 2 wire cordsets. Since the metalwork would normally involve
> built-up gear, what is a good way to enlarge an existing "double D" hole to
> the next size up? Not many of us would pop for the $200 greenlee punch, so
> what is second best? Nibbler, filing, etc??
>
> [Non-text portions of this message have been removed]
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12840. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 20:48:13 UTC
From: Robert Logan
Topic: 12820 Message: 12840

Geez, I didn't know they were that much! I picked up 2 of them at a garage sale for $4. They are often seen at such sales and flea markets for a nominal price. They do a great job of enlarging holes in various step sizes.

Bob, NZ5A

Sent from my iPhone

On Mar 25, 2013, at 3:31 PM, "Phil Heath/W8XLR" <arclight@...> wrote:

These work great. I use mine quite often...

http://www.amazon.com/Greenlee-30008-Multi-Hole-Step-Bit/dp/B001M0MDHK

73, Phil/W8XLR

From: Bob Macklin
Sent: Monday, March 25, 2013 4:10 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

About 1960 when I was a young technician fresh out of the USAF I need to make some square holes in a metal box but I did not have a square punch. I DO NOW!).

I asked out machinist how he made the square holes? It can't be done on the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where it was and he reached into his toolbox and handed me a FILE!

TRUE STORY!!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Monday, March 25, 2013 12:43 PM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

AHA! I KNEW those Bastard's (a type of Mexican Mill, I guess...) were good
for SOMETHING!

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com [mailto:mailto:DrakeRadio%40yahoogroups.com] On Behalf Of Bob Macklin

Sent: Monday, March 25, 2013 12:07 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

A MEXICAN MILL is a FILE!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Terrell Hamilton
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 11:33 AM
Subject: RE: [DrakeRadio] enlarging line cord holes in metal

Bob - Which is what... Dremel tool??

Terry K7WLD

Wenatchee, WA

From: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On
Behalf Of Bob Macklin
Sent: Monday, March 25, 2013 10:37 AM
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

MEXICAN MILL!

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: David Winfree
To: mailto:DrakeRadio%40yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
Sent: Monday, March 25, 2013 10:14 AM
Subject: [DrakeRadio] enlarging line cord holes in metal

Lots of folks retrofit 3 wire line cords in older equipment, originally
coming with 2 wire cordsets. Since the metalwork would normally involve
built-up gear, what is a good way to enlarge an existing "double D" hole to
the next size up? Not many of us would pop for the $200 greenlee punch, so
what is second best? Nibbler, filing, etc??

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12841. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 20:52:56 UTC
From: Joe
Topic: 12820 Message: 12841

----- Original Message -----
From: <vacuuminded2@...>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

> That's the type of bit I was referencing- they really do work well, about the best way to reliably make or expand holes in thin sheet metal.
> There are MUCH less expensive variants available at your local home improvement store that are good enough for this kind of stuff. Still expect to spend over $20 on one though. You won't regret the purchase.

Yup..like here...and a might less money too!
http://www.harborfreight.com/1-4-quarter-inch-3-4-quarter-inch-high-speed-steel-step-drill-44460.html

Joe - WA6RKN

[Non-text portions of this message have been removed]

12842. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 21:20:38 UTC
From: john
Topic: 12820 Message: 12842

>
>
>http://www.harborfreight.com/1-4-quarter-inch-3-4-quarter-inch-high-speed-steel-step-dril
l-44460.html

Ah, good old ChinaFreight. You MIGHT actually get a square one there. Of
course it will have been intended to be round, but...

John

12843. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 21:33:44 UTC
From: w7fe
Topic: 12820 Message: 12843

----- Original Message -----
From: "Bob Macklin" <macklinbob@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 1:10 PM
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

> About 1960 when I was a young technician fresh out of the USAF I need to
> make some square holes in a metal box but I did not have a square punch. I
> DO NOW!).
>
> I asked out machinist how he made the square holes? It can't be done on
> the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where
> it was and he reached into his toolbox and handed me a FILE!
>
> TRUE STORY!!
>
> Bob Macklin
> K5MYJ
> Seattle, Wa.
> "Real Radios Glow In The Dark"
>

Perhaps your machinist was not familiar with the Watts Square Hole drill bit. Patented by Henry Watts in 1917, it makes a square hole with very slightly rounded corners through the use of a Reuleaux triangle-shaped cutter. Watts Brothers Tool Works is still in business today making these things. I remember seeing them used for certain operations in the drill department of a shop where I worked in the mid 60's. They were sort of noisy, but they worked.

For those who care, an explanation of the tool's operation follows (taken from http://www.mikesenese.com/DOIT/2011/10/drilling-square-holes-with-a-reuleaux-triangle/) .

"Circular motion can be converted into a four-sided square using the Reuleaux triangle. The process relies on the property of Reuleaux triangle's diameter being consistent across all points, and when rolled and rotated simultaneously, tracing a square area with slightly rounded corners. By slightly altering the shape of the triangle to mimic a drill bit (for cutting and extracting material), a drill with a specialized rotating chuck can create perfect, four-sided holes. These drills were pioneered by Harry Watts, and can still be found today, albeit not at your typical home improvement store."

TMI?

73 de Stu, W7FE
Henderson, NV

12844. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 21:36:59 UTC
From: Garey Barrell
Topic: 12820 Message: 12844

Bob -

I used to make square holes on a Bridgeport. Yes they had a small
radius on the corners, depending on the smallest mill I hadn't
brokenyet! If they REALLY had to be square it took only a couple of
swipes of a file.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w7fe wrote:
> ----- Original Message -----
> From: "Bob Macklin" <macklinbob@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, March 25, 2013 1:10 PM
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
>
>> About 1960 when I was a young technician fresh out of the USAF I need to
>> make some square holes in a metal box but I did not have a square punch. I
>> DO NOW!).
>>
>> I asked out machinist how he made the square holes? It can't be done on
>> the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where
>> it was and he reached into his toolbox and handed me a FILE!
>>
>> TRUE STORY!!
>>
>> Bob Macklin
>> K5MYJ
>> Seattle, Wa.
>> "Real Radios Glow In The Dark"
>>
> Perhaps your machinist was not familiar with the Watts Square Hole drill
> bit. Patented by Henry Watts in 1917, it makes a square hole with very
> slightly rounded corners through the use of a Reuleaux triangle-shaped
> cutter. Watts Brothers Tool Works is still in business today making these
> things. I remember seeing them used for certain operations in the drill
> department of a shop where I worked in the mid 60's. They were sort of
> noisy, but they worked.
>
> For those who care, an explanation of the tool's operation follows (taken

> from
> http://www.mikesenese.com/DOIT/2011/10/drilling-square-holes-with-a-reuleaux-triangle/)
> .
>
> "Circular motion can be converted into a four-sided square using the
> Reuleaux triangle. The process relies on the property of Reuleaux triangle's
> diameter being consistent across all points, and when rolled and rotated
> simultaneously, tracing a square area with slightly rounded corners. By
> slightly altering the shape of the triangle to mimic a drill bit (for
> cutting and extracting material), a drill with a specialized rotating chuck
> can create perfect, four-sided holes. These drills were pioneered by Harry
> Watts, and can still be found today, albeit not at your typical home
> improvement store."
>
> TMI?
>
> 73 de Stu, W7FE
> Henderson, NV
>
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>
> Yahoo! Groups Links
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12845. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-25 23:19:59 UTC
From: Joe
Topic: 12820 Message: 12845

Remind me when I was a kid...I had a Saturday job, washing the trucks of a concrete company that was down the street. The company's employees always drove the trucks to the wash pad, so when one day, the boss came over and told me to get the Mexican dump truck from the foreman and wash it, I was ecstatic....thinking I was finally going to get to drive one of the rigs....until the foreman pointed out the wheelbarrow on the side of a 'mixer. Yeah...I learned! LOL!

Joe - WA6RKN

----- Original Message -----
From: "w7fe" <w7fe@...>
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

>> About 1960 when I was a young technician fresh out of the USAF I need to
>> make some square holes in a metal box but I did not have a square punch.
>> I
>> DO NOW!).
>>
>> I asked out machinist how he made the square holes? It can't be done on
>> the Bridgeport. He told me we had to use the MEXICAN MILL. I asked where
>> it was and he reached into his toolbox and handed me a FILE!

12846. TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 00:35:20 UTC
From: milton_valerio
Topic: 12846 Message: 12846

I noted that the cathode resistor was black due to high temp so I decided to change it for a new one, 3 different schematics I have shows a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero the S meter so.
Would it be possible that some models of TR4's came with different value resistor or the one installed was masking something else??
I replaced also the tantalum capacitor for a new fresh 10mfd one.

12847. ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 01:16:59 UTC
From: yash@aol.com
Topic: 12847 Message: 12847

Just picked up a ac-3 that someone cut the feed cable off about 4 inches from the supply. Any recommendations as to what to use for replacement? what was there looked just like the cable I used on my rotor feed. gray cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire. Luckily, I had a extra jones plug. If this wire is not good, what can I use and where can I buy some.
thanks
dale wt4t

[Non-text portions of this message have been removed]

12848. Re: [DrakeRadio] TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 01:21:04 UTC
From: Al Parker
Topic: 12846 Message: 12848

Hi,
I think you are looking in the wrong place, or at a fuzzy copy. I have never seen anything other than 15 ohm resistors in the cathode of the 6JB6's in any Drake. Using a higher resistance will make the meter peg, and not allow proper reading of the plate current for setting bias or operating. Probably would effectively increase the grid bias to reduce the idling current if it hasn't been adjusted, and not cause an overcurrent situation.
I've just ckd my cc's of a TR-4 and a TR-4Cw skem, both show 15 ohm, the TR-4C is fuzzy, but I think it calls for 1 or 2 watt units, 2 is what I've always used.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 3/25/2013 8:35 PM, milton_valerio wrote:
> I noted that the cathode resistor was black due to high temp so I
> decided to change it for a new one, 3 different schematics I have shows
> a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero
> the S meter so.
> Would it be possible that some models of TR4's came with different value
> resistor or the one installed was masking something else??
> I replaced also the tantalum capacitor for a new fresh 10mfd one.
>
>

12849. Re: [DrakeRadio] TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 01:27:37 UTC
From: Al Parker
Topic: 12846 Message: 12849

OK, I jumped to conclusions, you said S-meter, so you're not talking
about the cathode resistors for the finals. Please tell us just what
tube's cathode you're talking about.

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 3/25/2013 8:35 PM, milton_valerio wrote:
> I noted that the cathode resistor was black due to high temp so I
> decided to change it for a new one, 3 different schematics I have shows
> a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero
> the S meter so.
> Would it be possible that some models of TR4's came with different value
> resistor or the one installed was masking something else??
> I replaced also the tantalum capacitor for a new fresh 10mfd one.
>
>

12850. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 02:01:07 UTC
From: Paul Kraemer
Topic: 12847 Message: 12850

Dale
I make up new cables with the correct color and gauge wire
See the picture at
http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
That is a new cable 6.5ft oal
Realize it does not show the other end but it is there with the rca dongle
and new 12P connector
Paul K0UYA
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 8:16 PM
Subject: [DrakeRadio] ac-4 power cable

> Just picked up a ac-3 that someone cut the feed cable off about 4 inches
> from the supply. Any recommendations as to what to use for replacement?
> what was there looked just like the cable I used on my rotor feed. gray
> cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire.
> Luckily, I had a extra jones plug. If this wire is not good, what can I
> use and where can I buy some.
> thanks
> dale wt4t
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12851. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 02:02:26 UTC
From: Steve Wedge
Topic: 12847 Message: 12851

Problem with rotor cable - assuming ratings were followed on the original - is that the insulation isn't rated for the HV plate voltage. I think most of those cables are rated for 600V or less...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: yash@...
Sent: Monday, March 25, 2013 9:16 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] ac-4 power cable

Just picked up a ac-3 that someone cut the feed cable off about 4 inches from the supply. Any recommendations as to what to use for replacement? what was there looked just like the cable I used on my rotor feed. gray cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire. Luckily, I had a extra jones plug. If this wire is not good, what can I use and where can I buy some.
thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12852. Re: TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 02:14:47 UTC
From: milton_valerio
Topic: 12846 Message: 12852

haha, I forgot to mention it was the 6AQ5 but I found the problem and it is solved right now.

--- In DrakeRadio@yahoogroups.com, Al Parker <anchor@...> wrote:
>
> OK, I jumped to conclusions, you said S-meter, so you're not talking
> about the cathode resistors for the finals. Please tell us just what
> tube's cathode you're talking about.
>
> Al, W8UT
> www.boatanchors.org
> www.hammarlund.info
>
> "There is nothing -- absolutely nothing -- half so much
> worth doing as simply messing about in boats"
> Ratty, to Mole
>
> On 3/25/2013 8:35 PM, milton_valerio wrote:
> > I noted that the cathode resistor was black due to high temp so I
> > decided to change it for a new one, 3 different schematics I have shows
> > a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero
> > the S meter so.
> > Would it be possible that some models of TR4's came with different value
> > resistor or the one installed was masking something else??
> > I replaced also the tantalum capacitor for a new fresh 10mfd one.
> >
> >
>

12853. Re: [DrakeRadio] TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 02:34:04 UTC
From: Garey Barrell
Topic: 12846 Message: 12853

Milton -

ALL TR-4C Cathode resistors (I assume you're referring to the 6AQ5)
are 270 ohms. If the S-Meter won't ZERO, you have a different
problem. Possibly with V4, V11, or V15.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

milton_valerio wrote:
> I noted that the cathode resistor was black due to high temp so I decided to change it for a new one, 3 different schematics I have shows a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero the S meter so.
> Would it be possible that some models of TR4's came with different value resistor or the one installed was masking something else??
> I replaced also the tantalum capacitor for a new fresh 10mfd one.
>
>

12854. Re: [DrakeRadio] TR4C cathode resistor values....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 02:50:54 UTC
From: Milton Valerio
Topic: 12846 Message: 12854

yes, I noted that I was very sleepy and I soldered the tantalum capacitor backwards, hahahahaha I reversed it and it is working perfect now. by the way the previous owner soldered a 10 ohm resistor thats why I was wondering if there was the possibility for different values cause I never seen before other than 270 on an 6aq5 tube.

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Monday, March 25, 2013 8:34 PM
Subject: Re: [DrakeRadio] TR4C cathode resistor values....

Milton -

ALL TR-4C Cathode resistors (I assume you're referring to the 6AQ5)
are 270 ohms. If the S-Meter won't ZERO, you have a different
problem. Possibly with V4, V11, or V15.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

milton_valerio wrote:
> I noted that the cathode resistor was black due to high temp so I decided to change it for a new one, 3 different schematics I have shows a 270 ohm so I installed a new 270 ohm, to my surprise now I cant zero the S meter so.
> Would it be possible that some models of TR4's came with different value resistor or the one installed was masking something else??
> I replaced also the tantalum capacitor for a new fresh 10mfd one.
>
>

[Non-text portions of this message have been removed]

12855. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 12:33:47 UTC
From: yash@aol.com
Topic: 12847 Message: 12855

Paul
what is the price of the cable? where do I send payment? Have 12P connector already.
thanks
dale wt4t

-----Original Message-----
From: Paul Kraemer <elespe@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Mar 25, 2013 10:01 pm
Subject: Re: [DrakeRadio] ac-4 power cable

Dale
I make up new cables with the correct color and gauge wire
See the picture at
http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
That is a new cable 6.5ft oal
Realize it does not show the other end but it is there with the rca dongle
and new 12P connector
Paul K0UYA
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, March 25, 2013 8:16 PM
Subject: [DrakeRadio] ac-4 power cable

> Just picked up a ac-3 that someone cut the feed cable off about 4 inches
> from the supply. Any recommendations as to what to use for replacement?
> what was there looked just like the cable I used on my rotor feed. gray
> cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire.
> Luckily, I had a extra jones plug. If this wire is not good, what can I
> use and where can I buy some.
> thanks
> dale wt4t
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12856. TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:11:44 UTC
From: Steve Wedge
Topic: 12856 Message: 12856

I know I've seen a discussion or two about this. I've got an opportunity to purchase a TR-4 with the relay and SO-239 missing. I anticipate it's a bit tight "in there", but how about availability of a relay that will fit without hacking the rig?

Are there any stock relays out there that would work?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12857. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:23:34 UTC
From: Chgypsy@...
Topic: 12856 Message: 12857

, w1es1982@... writes:

I've got an opportunity to purchase a TR-4 with the relay and SO-239
missing. availability of a relay that will fit without hacking the rig?
Are there any stock relays out there that would work? Steve Wedge, W1ES/4
Yes the number for it has been printed many times (I'd have to look it
up), AND Drake had a small circuit board for that area for a plug in one. I
have done so in the past.
I don't know how much wire you have left from the cut out, so yours may
be a bit more difficult.
The source for the small board was John Kriner (TR7dude on Ebay) whether he
had any more I don't know.
If he does not let me know. Carl wd8nhk

[Non-text portions of this message have been removed]

12858. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:32:01 UTC
From: Garey Barrell
Topic: 12856 Message: 12858

Steve -

The relay is the same one that's used in the TR-4C, P&B/TYCO/??
R10-E1-Y4-V2.5. Mouser, et al have them in stock, about $25 last time
I looked.

John Kriner may still have the small PC board to mount it in the
TR-4. The board fits over the feedthrough capacitors coming up from
the chassis, and about a half dozen or so wires. It comes with full
installation instructions. Not a tough job as long as the leads
haven't been cut too short. Several terminate right in the area, buta
few come out of harnesses under the chassis.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I know I've seen a discussion or two about this. I've got an opportunity to purchase a TR-4 with the relay and SO-239 missing. I anticipate it's a bit tight "in there", but how about availability of a relay that will fit without hacking the rig?
>
> Are there any stock relays out there that would work?
>
>

12859. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:45:32 UTC
From: Steve Wedge
Topic: 12856 Message: 12859

Bingo! They do have them at Mouser. Thanks, Garey.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, March 26, 2013 9:32 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-4 Relay

Steve -

The relay is the same one that's used in the TR-4C, P&B/TYCO/??
R10-E1-Y4-V2.5. Mouser, et al have them in stock, about $25 last time
I looked.

John Kriner may still have the small PC board to mount it in the
TR-4. The board fits over the feedthrough capacitors coming up from
the chassis, and about a half dozen or so wires. It comes with full
installation instructions. Not a tough job as long as the leads
haven't been cut too short. Several terminate right in the area, buta
few come out of harnesses under the chassis.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I know I've seen a discussion or two about this. I've got an opportunity to purchase a TR-4 with the relay and SO-239 missing. I anticipate it's a bit tight "in there", but how about availability of a relay that will fit without hacking the rig?
>
> Are there any stock relays out there that would work?
>
>

[Non-text portions of this message have been removed]

12860. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:47:19 UTC
From: Steve Wedge
Topic: 12856 Message: 12860

Thanks, Carl.

I'll let you know if I need one. It's not "mine" yet

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Chgypsy@...
Sent: Tuesday, March 26, 2013 9:23 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-4 Relay

, w1es1982@... writes:

I've got an opportunity to purchase a TR-4 with the relay and SO-239
missing. availability of a relay that will fit without hacking the rig?
Are there any stock relays out there that would work? Steve Wedge, W1ES/4
Yes the number for it has been printed many times (I'd have to look it
up), AND Drake had a small circuit board for that area for a plug in one. I
have done so in the past.
I don't know how much wire you have left from the cut out, so yours may
be a bit more difficult.
The source for the small board was John Kriner (TR7dude on Ebay) whether he
had any more I don't know.
If he does not let me know. Carl wd8nhk

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12861. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:55:56 UTC
From: Garey Barrell
Topic: 12847 Message: 12861

Steve -

I believe that rating is from a conductor to ground. Conductor to
conductor in a cable should be twice that??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Problem with rotor cable - assuming ratings were followed on the original - is that the insulation isn't rated for the HV plate voltage. I think most of those cables are rated for 600V or less...
>

12862. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 13:57:54 UTC
From: David Winfree
Topic: 12820 Message: 12862

THanks for all the advice, and the entertainment too!

btw; here is true square hole saw, made for masonry:
http://www.youtube.com/watch?v=V9MELQh5a-k

Last nite, I did enlarge my little double D Heyco hole to a larger one. I used a nibbler and a round bastard file. THis was on a Eico 235, 20 gauge steel. THe biggest issue is that the had nibbler worked "blind", having to be used with the tool on the outside of the chassis. Anyway, small bites and mexican mill touchup did the trick. Hard to tell with the fitting installed it wasn't punched.

[Non-text portions of this message have been removed]

12863. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 14:02:33 UTC
From: Garey Barrell
Topic: 12856 Message: 12863

Steve -

Check with John before you order. His board has therelay socket
mounted, I think.

If he doesn't have any more boards, I have artwork.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Bingo! They do have them at Mouser. Thanks, Garey.
>

12864. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 14:05:09 UTC
From: Paul Kraemer
Topic: 12847 Message: 12864

I figger it up and let you know
Won't be much. The 3 cable has no shielded alc lead so it is pretty small
bundle
How long do you want? I made mine 6 1/2 ft so it could reach an extra foot.
I don't know what the limit would be but even 8 or 10 probably ok if you
need that much
Paul
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 26, 2013 7:33 AM
Subject: Re: [DrakeRadio] ac-4 power cable

> Paul
> what is the price of the cable? where do I send payment? Have 12P
> connector already.
> thanks
> dale wt4t
>
>
>
>
> -----Original Message-----
> From: Paul Kraemer <elespe@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Mon, Mar 25, 2013 10:01 pm
> Subject: Re: [DrakeRadio] ac-4 power cable
>
>
>
>
>
> Dale
> I make up new cables with the correct color and gauge wire
> See the picture at
> http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/
> That is a new cable 6.5ft oal
> Realize it does not show the other end but it is there with the rca dongle
> and new 12P connector
> Paul K0UYA
> ----- Original Message -----
> From: <yash@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, March 25, 2013 8:16 PM
> Subject: [DrakeRadio] ac-4 power cable

>
>> Just picked up a ac-3 that someone cut the feed cable off about 4 inches
>> from the supply. Any recommendations as to what to use for replacement?
>> what was there looked just like the cable I used on my rotor feed. gray
>> cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire.
>> Luckily, I had a extra jones plug. If this wire is not good, what can I
>> use and where can I buy some.
>> thanks
>> dale wt4t
>>
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>> [Non-text portions of this message have been removed]
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12865. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 14:11:11 UTC
From: Garey Barrell
Topic: 12820 Message: 12865

And here is a REAL square MILL!!

<http://www.youtube.com/watch?v=ALiqAXiTQBg>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

David Winfree wrote:
> THanks for all the advice, and the entertainment too!
>
> btw; here is true square hole saw, made for masonry:
> http://www.youtube.com/watch?v=V9MELQh5a-k
>
>

12866. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 14:19:57 UTC
From: Paul Kraemer
Topic: 12847 Message: 12866

Garey
I have often wondered about that. If a wire is rated 600v to ground and it is next to an equal rated wire then isn't the actual rating wire to wire 1200v?
OTOH I am more concerned about the voltage rating on the connectors
The original Jones plug / socket was rated at 730vrms @ sea level
The new equivalent with plastic shell which is what is available is rated much less. Works fine but don't look at the rating.
AMP Supply obviously wasn't concerned. My LK550ZC with 2kv external transformer uses same series to connect the transformer to the amp chassis.
Paul K0UYA

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 26, 2013 8:55 AM
Subject: Re: [DrakeRadio] ac-4 power cable

> Steve -
>
> I believe that rating is from a conductor to ground. Conductor to
> conductor in a cable should be twice that??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> Problem with rotor cable - assuming ratings were followed on the
>> original - is that the insulation isn't rated for the HV plate voltage.
>> I think most of those cables are rated for 600V or less...
>>
>
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> Yahoo! Groups Links
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12867. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 14:56:50 UTC
From: yash@aol.com
Topic: 12847 Message: 12867

Paul
5-61/2' would be fine.
dale

-----Original Message-----
From: Paul Kraemer <elespe@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Mar 26, 2013 10:07 am
Subject: Re: [DrakeRadio] ac-4 power cable

I figger it up and let you know
Won't be much. The 3 cable has no shielded alc lead so it is pretty small
bundle
How long do you want? I made mine 6 1/2 ft so it could reach an extra foot.
I don't know what the limit would be but even 8 or 10 probably ok if you
need that much
Paul
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 26, 2013 7:33 AM
Subject: Re: [DrakeRadio] ac-4 power cable

> Paul
> what is the price of the cable? where do I send payment? Have 12P
> connector already.
> thanks
> dale wt4t
>
>
>
>
> -----Original Message-----
> From: Paul Kraemer <elespe@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Mon, Mar 25, 2013 10:01 pm
> Subject: Re: [DrakeRadio] ac-4 power cable
>
>
>
>
>
> Dale
> I make up new cables with the correct color and gauge wire
> See the picture at
> http://s358.photobucket.com/albums/oo28/ee_design/AC4REBUILD/

> That is a new cable 6.5ft oal
> Realize it does not show the other end but it is there with the rca dongle
> and new 12P connector
> Paul K0UYA
> ----- Original Message -----
> From: <yash@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, March 25, 2013 8:16 PM
> Subject: [DrakeRadio] ac-4 power cable
>
>> Just picked up a ac-3 that someone cut the feed cable off about 4 inches
>> from the supply. Any recommendations as to what to use for replacement?
>> what was there looked just like the cable I used on my rotor feed. gray
>> cover 9 wire with 3, 14 and the rest 16 gauge. all are stranded wire.
>> Luckily, I had a extra jones plug. If this wire is not good, what can I
>> use and where can I buy some.
>> thanks
>> dale wt4t
>>
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>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12868. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 15:04:54 UTC
From: Garey Barrell
Topic: 12847 Message: 12868

Paul -

I think that's what I said!!!? :-)

Yes, the connector being sold today is plastic. Even the original phenolic connector was only rated for 250 VRMS! That's about 700 peak (DC), so not much margin. On the other hand, 50,000+ transmitters/transceivers were built with them, and I've never seen a case where one broke down to voltage. Certainly there had to be some margin '+', but ...

Theplastic ones from Molex are rated only "250 V", no RMS! Hopefully that is also RMS.... :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
> Garey
> I have often wondered about that. If a wire is rated 600v to ground and it
> is next to an equal rated wire then isn't the actual rating wire to wire
> 1200v?
> OTOH I am more concerned about the voltage rating on the connectors
> The original Jones plug / socket was rated at 730vrms @ sea level
> The new equivalent with plastic shell which is what is available is rated
> much less. Works fine but don't look at the rating.
> AMP Supply obviously wasn't concerned. My LK550ZC with 2kv external
> transformer uses same series to connect the transformer to the amp chassis.
> Paul K0UYA
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, March 26, 2013 8:55 AM
> Subject: Re: [DrakeRadio] ac-4 power cable
>
>
>> Steve -
>>
>> I believe that rating is from a conductor to ground. Conductor to
>> conductor in a cable should be twice that??
>>

>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> Problem with rotor cable - assuming ratings were followed on the
>>> original - is that the insulation isn't rated for the HV plate voltage.
>>> I think most of those cables are rated for 600V or less...
>>>
>>

12869. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 15:45:48 UTC
From: Paul Kraemer
Topic: 12847 Message: 12869

Garey
I think I thought that is what you said but wasn't sure.
Molex doesn't really say much about ratings and I'm not real worried about using them (to the point of paying inflated ebay price for an old connector) but in the industrial side of the shop we couldn't do it.
Paul
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, March 26, 2013 10:04 AM
Subject: Re: [DrakeRadio] ac-4 power cable

> Paul -
>
> I think that's what I said!!!? :-)
>
> Yes, the connector being sold today is plastic. Even the original
> phenolic connector was only rated for 250 VRMS! That's about 700 peak
> (DC), so not much margin. On the other hand, 50,000+
> transmitters/transceivers were built with them, and I've never seen a
> case where one broke down to voltage. Certainly there had to be some
> margin '+', but ...
>
> Theplastic ones from Molex are rated only "250 V", no RMS! Hopefully
> that is also RMS.... :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Paul Kraemer wrote:
>> Garey
>> I have often wondered about that. If a wire is rated 600v to ground and
>> it
>> is next to an equal rated wire then isn't the actual rating wire to wire
>> 1200v?
>> OTOH I am more concerned about the voltage rating on the connectors
>> The original Jones plug / socket was rated at 730vrms @ sea level
>> The new equivalent with plastic shell which is what is available is rated
>> much less. Works fine but don't look at the rating.
>> AMP Supply obviously wasn't concerned. My LK550ZC with 2kv external
>> transformer uses same series to connect the transformer to the amp

>> chassis.
>> Paul K0UYA
>>
>> ----- Original Message -----
>> From: "Garey Barrell" <k4oah@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Tuesday, March 26, 2013 8:55 AM
>> Subject: Re: [DrakeRadio] ac-4 power cable
>>
>>
>>> Steve -
>>>
>>> I believe that rating is from a conductor to ground. Conductor to
>>> conductor in a cable should be twice that??
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>> <www.k4oah.com>
>>>
>>> Steve Wedge wrote:
>>>> Problem with rotor cable - assuming ratings were followed on the
>>>> original - is that the insulation isn't rated for the HV plate voltage.
>>>> I think most of those cables are rated for 600V or less...
>>>>
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> Yahoo! Groups Links
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12870. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 17:47:53 UTC
From: Steve Wedge
Topic: 12847 Message: 12870

I have always wondered what the rating of the original cable was, because I've never seen anything really extraordinary about it otherwise.

If they were using regular off the shelf cable, it does make replacement a lot easier.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Mar 26, 2013, at 9:55 AM, Garey Barrell <k4oah@...m> wrote:

> Steve -
>
> I believe that rating is from a conductor to ground. Conductor to
> conductor in a cable should be twice that??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Steve Wedge wrote:
> > Problem with rotor cable - assuming ratings were followed on the original - is that the insulation isn't rated for the HV plate voltage. I think most of those cables are rated for 600V or less...
> >
>
>
>

[Non-text portions of this message have been removed]

12871. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 18:39:23 UTC
From: Garey Barrell
Topic: 12847 Message: 12871

Steve -

I don't know of any commercial cable with four BIG (16?), six small (20?) and one (1) shielded cable in their catalog. Almost certainly Drake had Belden or someone specifically manufacture that cable.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I have always wondered what the rating of the original cable was, because I've never seen anything really extraordinary about it otherwise.
>
> If they were using regular off the shelf cable, it does make replacement a lot easier.
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On Mar 26, 2013, at 9:55 AM, Garey Barrell <k4oah@...> wrote:
>
>> Steve -
>>
>> I believe that rating is from a conductor to ground. Conductor to
>> conductor in a cable should be twice that??
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> Problem with rotor cable - assuming ratings were followed on the original - is that the insulation isn't rated for the HV plate voltage. I think most of those cables are rated for 600V or less...
>>>
>>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12872. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 18:59:21 UTC
From: <w1es1982@...>
Topic: 12847 Message: 12872

It would be interesting to find out. Given that our needs today in 2013 are not the same as they were 50 years ago, it's hard for me to say. I suspect a lot of the other transceiver manufacturers would have used something very similar, if not identical.

At any rate, I do seem to recall that most insulated, non-Romex wire was and is rated for 600V and I had looked around at making a substitute at one time (hence my remembering the 600V rating). It is conceivable that the B+ wire could be in proximity to the shield wire, so I'd probably suspect that they were used close to their ratings.

Again, it would be interesting if someone could find the original spec from Drake.

Steve, W1ES/4

---- Garey Barrell <k4oah@...> wrote:
> Steve -
>
> I don't know of any commercial cable with four BIG (16?), six small
> (20?) and one (1) shielded cable in their catalog. Almost certainly
> Drake had Belden or someone specifically manufacture that cable.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
> > I have always wondered what the rating of the original cable was, because I've never seen anything really extraordinary about it otherwise.
> >
> > If they were using regular off the shelf cable, it does make replacement a lot easier.
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> >
> > On Mar 26, 2013, at 9:55 AM, Garey Barrell <k4oah@...> wrote:
> >
> >> Steve -
> >>
> >> I believe that rating is from a conductor to ground. Conductor to
> >> conductor in a cable should be twice that??
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>

> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >> <www.k4oah.com>
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> >> Steve Wedge wrote:
> >>> Problem with rotor cable - assuming ratings were followed on the original - is that the insulation isn't rated for the HV plate voltage. I think most of those cables are rated for 600V or less...
> >>>
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> > [Non-text portions of this message have been removed]
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12873. PTO interchangability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 19:09:45 UTC
From: William Houghton
Topic: 12873 Message: 12873

Hi Garey,

Are the PTO's from TR-3's, TR-4's, and TR-4C's interchangable? I don't recall if this has been discussed before.

Thanks,

Bill

[Non-text portions of this message have been removed]

12874. Re: [DrakeRadio] PTO interchangability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 19:16:03 UTC
From: Garey Barrell
Topic: 12873 Message: 12874

Bill -

Yes and no.... :-)

The TR-3 is a tube version so not feasible.

The TR-4 and TR-4C are different because of the dual dial system on
the "C".

The TR-4CwRIT is different because the RTTY shift function has been
replaced by the "RIT" function.

So the TR-4 and TR-4C/ CW would be interchangeable within the same model.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Are the PTO's from TR-3's, TR-4's, and TR-4C's interchangable? I don't recall if
> this has been discussed before.
>
>

12875. Re: [DrakeRadio] enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 19:56:52 UTC
From: Richard Fredrickson
Topic: 12820 Message: 12875

Found my Dremel tool (and appropriate bit) very useful for this purpose. Leaves a burr-less surface. Requires a steady hand. Did an AC-4 this way last month. 1) tape off inside chassis with painter's blue tape, 2) grind hole to dimension, 3) vacuum skree from the tape "cup", 4) install new AC cord and polypro cord lock. No problems.

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, March 26, 2013 7:11 AM
Subject: Re: [DrakeRadio] enlarging line cord holes in metal

And here is a REAL square MILL!!

<http://www.youtube.com/watch?v=ALiqAXiTQBg>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<http://www.k4oah.com/>

David Winfree wrote:
> THanks for all the advice, and the entertainment too!
>
> btw; here is true square hole saw, made for masonry:
> http://www.youtube.com/watch?v=V9MELQh5a-k
>
>

[Non-text portions of this message have been removed]

12876. Re: enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 20:06:13 UTC
From: Mark Brueggemann
Topic: 12820 Message: 12876

--- On Mon, 3/25/13, "David Winfree" <mw11038@...> wrote:

> what is a good way to enlarge an existing "double D" hole to
> the next size up?

The compromise I made on my 2B was to use an IEC round AC cord of fairly small diameter and just a plain grommet instead of a strain relief. Then I secured the cord inside the 2B using a P-clamp to a terminal strip stud near the hole. Works and looks a treat and no chassis cutting.

Mark K5LXP
Albuquerque, NM

12877. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 20:07:22 UTC
From: Paul Kraemer
Topic: 12847 Message: 12877

Steve et al
Back in the day at the AEC research reactor where I was employed as a tech while attending ISU we techs made numerous special cables for in and around the core. Made them because either there was nothing like what was required and commercial cables did not respond well to neutron flux.
The proceedure was then and still works here today
Put the wire spool cart in the hallway
Pull all conductors at once in the same direcion
When all conductors including any internal coax were present the one end of each was stripped, twisted, soldered, attached to the fish tape which had been inserted into a length of pvc jacket and the entire bundle pulled through. This required application of talc and sometimes inflating the jacket with hi pressure air on the 100 ft long cables. Pulling all the wire in the same directtion off the spool makes it want to recoil in an orderly manner. The pvc jacket was the next size HST required but DO NOT shrink it after---looks like home made then.
I make any special short cable I need / want today---same way. The only other resources I have is my industrial control business provides me a nice inventory of mil spec wire in assortment of gauge and color---even striped. My marriage provides my able assistant---it is NOT a one person job.
So, I offer, if anyone wants material for a special cable I am willing to share the resources for that at just above what it costs me to replace at current price. I will assemble the cable too for cost. I'll even put the connector(s) on but then some may consider them too pricey. It does take time (usually more than I estimate) to do it right.
Paul K0UYA

----- Original Message -----
From: <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Cc: "Garey Barrell" <k4oah@...>
Sent: Tuesday, March 26, 2013 1:59 PM
Subject: Re: [DrakeRadio] ac-4 power cable

> It would be interesting to find out. Given that our needs today in 2013
> are not the same as they were 50 years ago, it's hard for me to say. I
> suspect a lot of the other transceiver manufacturers would have used
> something very similar, if not identical.
>
> At any rate, I do seem to recall that most insulated, non-Romex wire was
> and is rated for 600V and I had looked around at making a substitute at
> one time (hence my remembering the 600V rating). It is conceivable that
> the B+ wire could be in proximity to the shield wire, so I'd probably
> suspect that they were used close to their ratings.
>

> Again, it would be interesting if someone could find the original spec
> from Drake.
>
> Steve, W1ES/4
>
> ---- Garey Barrell <k4oah@...> wrote:
>> Steve -
>>
>> I don't know of any commercial cable with four BIG (16?), six small
>> (20?) and one (1) shielded cable in their catalog. Almost certainly
>> Drake had Belden or someone specifically manufacture that cable.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>> > I have always wondered what the rating of the original cable was,
>> > because I've never seen anything really extraordinary about it
>> > otherwise.
>> >
>> > If they were using regular off the shelf cable, it does make
>> > replacement a lot easier.
>> >
>> > Steve Wedge, W1ES/4
>> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>> >
>> > On Mar 26, 2013, at 9:55 AM, Garey Barrell <k4oah@...>
>> > wrote:
>> >
>> >> Steve -
>> >>
>> >> I believe that rating is from a conductor to ground. Conductor to
>> >> conductor in a cable should be twice that??
>> >>
>> >> 73, Garey - K4OAH
>> >> Glen Allen, VA
>> >>
>> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> >> Steve Wedge wrote:
>> >>> Problem with rotor cable - assuming ratings were followed on the
>> >>> original - is that the insulation isn't rated for the HV plate
>> >>> voltage. I think most of those cables are rated for 600V or less...
>> >>>

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>> > [Non-text portions of this message have been removed]
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12878. Re: enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 20:54:27 UTC
From: David Winfree
Topic: 12820 Message: 12878

Dremel; diamond bit or ceramic or carbide or?? Grinding I would have thought to be too slow a process.

--- In DrakeRadio@yahoogroups.com, Richard Fredrickson <lorijean_drdick@...> wrote:
>
> Found my Dremel tool (and appropriate bit) very useful for this purpose.Â Leaves a burr-less surface.Â Requires a steady hand.Â Did an AC-4 this way last month.Â 1) tape off inside chassis with painter's blue tape, 2) grind hole to dimension, 3) vacuum skree from the tape "cup",Â 4) install new AC cord and polypro cord lock.Â No problems.
>
>
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, March 26, 2013 7:11 AM
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
> Â
> And here is a REAL square MILL!!
>
> <http://www.youtube.com/watch?v=ALiqAXiTQBg>
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> David Winfree wrote:
> > THanks for all the advice, and the entertainment too!
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> > btw; here is true square hole saw, made for masonry:
> > http://www.youtube.com/watch?v=V9MELQh5a-k
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> [Non-text portions of this message have been removed]
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12879. FS: 34-PNB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 21:51:40 UTC
From: Kevin LaHaie
Topic: 12879 Message: 12879

I received in exchange for a radio repair a 34-PNB noise blanker, but my TR-4C already has one.

Tested in my TR-4C and works just like my other one.

This one is a bit different than mine, having a bracket for the plug, where my other one has the plug on wire pigtails.

Claims to be valid for TR4 Xcvrs with serial numbers above 31321

A little corrosion on the frame, can send pix

Contact off list if you are interestedin this sometimes hard to find accessory.

Thanks to the list for the bandwidth.

Kevin K7ZS
kevin.k7zs (@at) gmail dot com
503-628-8480 near Portland Oregon

[Non-text portions of this message have been removed]

12880. Re: [DrakeRadio] TR-4 Relay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 22:12:29 UTC
From: Mark Pilant
Topic: 12856 Message: 12880

Hi Steve.

I picked up the relay PCB with the socket mounted from the "tr7dude".
I then ordered the relay from Allied, because I was placing an order
with them. These went into the TR-4 I've been recently working on,
and they work great.

73

- Mark N1VQW

12881. Re: [DrakeRadio] Re: enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 23:16:32 UTC
From: Steve Wedge
Topic: 12820 Message: 12881

Yep - that's similar to my suggestion. I try to avoid removing any metal from a chassis: someday, someone may want to return the set to original condition. As long as there's a way to make a change without grinding/filing/hacking, and it works, I go with that way.

My $0.02...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mark Brueggemann
Sent: Tuesday, March 26, 2013 4:06 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: enlarging line cord holes in metal

--- On Mon, 3/25/13, "David Winfree" <mw11038@...> wrote:

> what is a good way to enlarge an existing "double D" hole to
> the next size up?

The compromise I made on my 2B was to use an IEC round AC cord of fairly small diameter and just a plain grommet instead of a strain relief. Then I secured the cord inside the 2B using a P-clamp to a terminal strip stud near the hole. Works and looks a treat and no chassis cutting.

Mark K5LXP
Albuquerque, NM

[Non-text portions of this message have been removed]

12882. Re: [DrakeRadio] ac-4 power cable

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 23:18:31 UTC
From: Steve Wedge
Topic: 12847 Message: 12882

Interesting. Never thought about doing it that way

I'm fortunate right now that I don't have any power supplies that are in need, but RARSFest is coming up on Saturday...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Paul Kraemer
Sent: Tuesday, March 26, 2013 4:07 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] ac-4 power cable

Steve et al
Back in the day at the AEC research reactor where I was employed as a tech while attending ISU we techs made numerous special cables for in and around the core. Made them because either there was nothing like what was required and commercial cables did not respond well to neutron flux.
The proceedure was then and still works here today
Put the wire spool cart in the hallway
Pull all conductors at once in the same direcion
When all conductors including any internal coax were present the one end of each was stripped, twisted, soldered, attached to the fish tape which had been inserted into a length of pvc jacket and the entire bundle pulled through. This required application of talc and sometimes inflating the jacket with hi pressure air on the 100 ft long cables. Pulling all the wire in the same directtion off the spool makes it want to recoil in an orderly manner. The pvc jacket was the next size HST required but DO NOT shrink it after---looks like home made then.
I make any special short cable I need / want today---same way. The only other resources I have is my industrial control business provides me a nice inventory of mil spec wire in assortment of gauge and color---even striped.
My marriage provides my able assistant---it is NOT a one person job.
So, I offer, if anyone wants material for a special cable I am willing to share the resources for that at just above what it costs me to replace at current price. I will assemble the cable too for cost. I'll even put the connector(s) on but then some may consider them too pricey. It does take time (usually more than I estimate) to do it right.
Paul K0UYA

----- Original Message -----
From: <w1es1982@...>

To: <DrakeRadio@yahoogroups.com>
Cc: "Garey Barrell" <k4oah@...>
Sent: Tuesday, March 26, 2013 1:59 PM
Subject: Re: [DrakeRadio] ac-4 power cable

> It would be interesting to find out. Given that our needs today in 2013
> are not the same as they were 50 years ago, it's hard for me to say. I
> suspect a lot of the other transceiver manufacturers would have used
> something very similar, if not identical.
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> At any rate, I do seem to recall that most insulated, non-Romex wire was
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> one time (hence my remembering the 600V rating). It is conceivable that
> the B+ wire could be in proximity to the shield wire, so I'd probably
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12883. Re: [DrakeRadio] Re: enlarging line cord holes in metal

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-26 23:35:41 UTC
From: Richard Fredrickson
Topic: 12820 Message: 12883

Happened to have a half-used diamond bit lying around so used it. Have used carbide bits before, on other chassis'. Remember your safety goggles!

Dick - WA0DIM
Keizer, OR

From: David Winfree <dmw11038@...>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, March 26, 2013 1:54 PM
Subject: [DrakeRadio] Re: enlarging line cord holes in metal

Dremel; diamond bit or ceramic or carbide or?? Grinding I would have thought to be too slow a process.

--- In mailto:DrakeRadio%40yahoogroups.com, Richard Fredrickson <lorijean_drdick@...> wrote:
>
> Found my Dremel tool (and appropriate bit) very useful for this purpose.Â Leaves a burr-less surface.Â Requires a steady hand.Â Did an AC-4 this way last month.Â 1) tape off inside chassis with painter's blue tape, 2) grind hole to dimension, 3) vacuum skree from the tape "cup",Â 4) install new AC cord and polypro cord lock.Â No problems.
>
>
> From: Garey Barrell <k4oah@...>
> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Tuesday, March 26, 2013 7:11 AM
> Subject: Re: [DrakeRadio] enlarging line cord holes in metal
>
> Â
> And here is a REAL square MILL!!
>
> <http://www.youtube.com/watch?v=ALiqAXiTQBg>
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> David Winfree wrote:
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> > http://www.youtube.com/watch?v=V9MELQh5a-k
> >

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> [Non-text portions of this message have been removed]
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12884. Wanted Nice C Line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-27 19:30:12 UTC
From: ko4bg
Topic: 12884 Message: 12884

Hello, I hope this is not the wrong way to go about this if so I apologize.
I am looking for a Nice C line. Anyone have one that is in Very Good Condition both in Appearance and Operational. If so please give me a call at 256 462 3580 or drop me a note at ko4bg1atgmail.com
I can arrange pick up at the Dayton Hamvention. Or we can arrange shipping.
Thanks
Woody "KO4BG"

12885. Re: [DrakeRadio] looking for t4x transmitter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 01:21:02 UTC
From: Bob Salmon
Topic: 12774 Message: 12885

I'm sending you a few short vids of the twins in action. I have more if you wish to see more.
I'd like to sell these soon. Let me know. Thanks,
Bob n3jqd

Sent from my iPad

On Mar 25, 2013, at 9:11 AM, "yash@..." <yash@...> wrote:

> Bob
> as long as the rigs are decent, don't care a lot about sn#'s have manuals for all the drakes from Garey. I have several supplies also. I got into SDR 8 years ago with a kit sdr-1000 went up to a 5000 and ended up running a 1500 with a amp, but mostly QRP. that with my heath twins, ft-1000d and a few other old rigs ,balances out well. I still have a beautiful r4b and want to put the drake line back on the air ,if I can find a decent transmitter.
> thanks
> dale wt4t
>
> -----Original Message-----
> From: Bob Salmon <bobsalmon@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sun, Mar 24, 2013 9:32 pm
> Subject: Re: [DrakeRadio] looking for t4x transmitter
>
> Hi. I wrote about a week ago. I'm going to send you some photos of my 2 T4X's. do you want the serial numbers? Do you any PS or speakers? I'm looking to get into SDR now. An abrupt change from tubes , I know.
> Thanks for your time.
> Bob
> N3JQD
>
> Sent from my iPad
>
> On Mar 23, 2013, at 4:40 PM, "yash@...@...> wrote:
>
> > Mike
> > would like to see a coupla of pictures of the C.
> > thanks
> > dale wt4t
> >
> > -----Original Message-----
> > From: Michael Shelly <wb2kki@...>
> > To: DrakeRadio <DrakeRadio@yahoogroups.com>
> > Sent: Sat, Mar 23, 2013 10:02 am
> > Subject: Re: [DrakeRadio] looking for t4x transmitter

> >
> > I have a nice tx4c works great is very clean just has a small scatch on front. Will sell $350.00 plus shipping. E-mail me off site and I'll send pics.
> >
> > Mike
> > WB2KKI
> >
> > >_____
> > >From: "yash@...@...>
> > >To: DrakeRadio@yahoogroups.com
> > >Sent: Saturday, March 23, 2013 9:51 AM
> > >Subject: [DrakeRadio] looking for t4x transmitter
> > >
> > >
> > >Looking for a operational rig. cosmetics are not very important,operational is. Will consider any of the t4x series. can do pay pal + or USPS MO.Please get back off list.
> > >THANKS
> > >DALE WT4T
> > >
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> > 1 Tip to Burn 12Ibs a Month
> > Famous TV Doctor Discusses This Shocking Weight loss Discovery.
> > DailyHealthConsumer.com
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> OVERSTOCK ipads: $30.93
> Get 32GB Apple iPad for as low as $30.93. Limit 1.Day. Grab yours Now!
> http://thirdpartyoffers.juno.com/TGL3141/514fa936b0bff293623f2st01duc
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12886. Garey K4OAH Thanks.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 04:09:26 UTC
From: w6mqi
Topic: 12886 Message: 12886

Hi Garey
Just wanted say I've been spoiled by your nice Drake service CD's which I purchased from you about a year ago. I recently picked up a basket case Johnson Viking Range which I'm in the process of bringing back to life. I found the the manuals which were available to be good, but lacked the photo detail that your CD's provide, so I asked around for anyone who might have some high res photos of the component side and received nothing but grief from people Geez those Johnson guys sure are snobs about a rig that's not even all that good. Anyway looking forward to your next edition Drake CD's two thumbs up....

73,Dave
W6MQI

12887. Re: [DrakeRadio] Garey K4OAH Thanks.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 04:18:53 UTC
From: Dan Galligan
Topic: 12886 Message: 12887

Dave,
It's not just the Johnson guys who tend towards being "snobs". I'll leave off names, but some folks, down right get their "panties in a bunch", if threads go even slightly off topic.
The moderators here, should be the example of how every reflector, should be moderated.
I, too, wish that some enterprising person, would follow Garey's lead, and come out, with similar discs, for not just Johnson, but other classic old brands, as well.
We are fortunate, to have so many really smart, and eminently helpful folks, populating this reflector.

Dan

That government is best, which governs the least, because its people discipline themselves.
Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Mar 27, 2013, at 21:09, w6mqi <w6mqi@...> wrote:

> Hi Garey
> Just wanted say I've been spoiled by your nice Drake service CD's which I purchased from you about a year ago. I recently picked up a basket case Johnson Viking Range which I'm in the process of bringing back to life. I found the the manuals which were available to be good, but lacked the photo detail that your CD's provide, so I asked around for anyone who might have some high res photos of the component side and received nothing but grief from people Geez those Johnson guys sure are snobs about a rig that's not even all that good. Anyway looking forward to your next edition Drake CD's two thumbs up....
>
> 73,Dave
> W6MQI
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12888. Re: [DrakeRadio] Garey K4OAH Thanks.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 04:53:26 UTC
From: Jim Shorney
Topic: 12886 Message: 12888

On Thu, 28 Mar 2013 04:09:26 -0000, w6mqi wrote:

> I asked around for anyone who might have some high res photos of the component side and received nothing but grief from people

Grief over photos? I can't imagine that. As part of my "travels", I've started photo documenting interesting pieces of equipment that come across my bench. Including Drake stuff, of course. Sorry, no Johnsons (yet). Maybe someday I'll publish for money, but in the meantime I'll send them to whoever might need something.

I agree that Garey does a great job with the group.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12889. Re: [DrakeRadio] Garey K4OAH Thanks.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 11:29:37 UTC
From: Steve Wedge
Topic: 12886 Message: 12889

I'll second that, Dan, and these groups are an integral part of the enjoyment of these radios.

One of the other nice things about this reflector in particular is how we can have differences of opinion (Sherwood mods come immediately to mind) and still be mostly civil about it. Such is not the case on many reflectors.

I'll continue to read, post and enjoy everyone's company on here...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Thursday, March 28, 2013 12:18 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Garey K4OAH Thanks.

Dave,
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Thomas Jefferson

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On Mar 27, 2013, at 21:09, w6mqi <w6mqi@...> wrote:

> Hi Garey
> Just wanted say I've been spoiled by your nice Drake service CD's which I purchased from you about a year ago. I recently picked up a basket case Johnson Viking Range which I'm in the process of bringing back to life. I found the the manuals which were available to be good, but lacked the photo detail that your CD's provide, so I asked around for anyone who might have some high res photos of the component side and received nothing but grief from people Geez those Johnson guys sure are snobs about a rig that's not even all that good.

Anyway looking forward to your next edition Drake CD's two thumbs up....
>
> 73,Dave
> W6MQI
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12890. Re: [DrakeRadio] Garey K4OAH Thanks.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-28 16:20:20 UTC
From: Dan Galligan
Topic: 12886 Message: 12890

Steve/Richard,
Again, I don't wish to sound as if I am bashing any particular group's reflector, so, I'll leave out specific group names. They are ALL generally helpful, some more than others. But, as helpful as they may be, they sometimes seem petty, or curt, when the moderator will demand an "End of thread", or comment in a snarky tone, how it is not a reflector for (insert the off-topic here), on an otherwise interesting and informative topic.
Whereas, around here, we seem to "get it", that we are generally all ham radio operators. As such, we enjoy talking about things, and as is human nature, topics, can, and frequently do, go off in a tangential manner. I have rarely seen the moderators here, tell folks that a discussion has gone too far off topic, and things need to wrap up. But, when I have seen it, it is always done, with courtesy, and it was the right thing to do at the time.
Last week, I had an off-list discussion, with the "head man in charge" on the list, to which I am reflecting upon. While he was very forthcoming, honest and courteous, he could not see my point, and informed me, that the reflector, represented the wishes of the board, and would continue to do the same. That, will not keep me from using it, but at least, I will not get frustrated, when the moderator puts a stop, to a thread that I find very interesting. I know how and why, they do, what they do, and while I may disagree, with the policy, it's THEIR reflector, and they can run it as they please. I am certain that the "powers that be", over there, would never stoop so low, as to sign up here, and see how a successful reflector, with reasoned moderation, is able to keep most of the people, happy, most of the time.
Look, I am new to learning about these wonderful old radios, and electronics, in general. So, it could accurately be said that I am here as a student, and you all, (on the various reflectors, of which I subscribe) are the teachers. So maybe I am a bit skewed. When things do go OT, I am still learning something, that I likely need to learn, and for me, that is a very good thing.
So, yes, this is a very long way of explaining how much I appreciate moderators, who do a FINE job, that is very thankless, for the most part. We have a golden group, here, and one I am very grateful, for it's existence, and for the wealth of knowledge, among people, so willing to share that knowledge, for the good of the hobby.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

REAL radios glow in the dark, and have lethal voltages present.

Sent from my iPad.

[Non-text portions of this message have been removed]

12891. RE: [DrakeRadio] Digest Number 1926

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-29 10:08:37 UTC
From: Bob DeHaney
Topic: 12891 Message: 12891

And then there are groups where you are banned with no warning, no communication of any kind, no information as to why one was banned, and no response to any emails.

Vy 73 de Bob DJ0RD/WU5T

-----Original Message-----
From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com]
Sent: 29 March 2013 10:33
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Digest Number 1926

There are 2 messages in this issue.

Topics in this digest:

1a. Re: Garey K4OAH Thanks.
From: Steve Wedge
1b. Re: Garey K4OAH Thanks.
From: Dan Galligan

Messages

1a. Re: Garey K4OAH Thanks.
Posted by: "Steve Wedge" w1es1982@... w1es
Date: Thu Mar 28, 2013 4:29 am ((PDT))

I'll second that, Dan, and these groups are an integral part of the enjoyment of these radios.

One of the other nice things about this reflector in particular is how we can have differences of opinion (Sherwood mods come immediately to mind) and still be mostly civil about it. Such is not the case on many reflectors.

I'll continue to read, post and enjoy everyone's company on here...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Thursday, March 28, 2013 12:18 AM
To: DrakeRadio@yahoogroups.com

Subject: Re: [DrakeRadio] Garey K4OAH Thanks.

Dave,
It's not just the Johnson guys who tend towards being "snobs". I'll leave off names, but some folks, down right get their "panties in a bunch", if threads go even slightly off topic.
The moderators here, should be the example of how every reflector, should be moderated.
I, too, wish that some enterprising person, would follow Garey's lead, and come out, with similar discs, for not just Johnson, but other classic old brands, as well.
We are fortunate, to have so many really smart, and eminently helpful folks, populating this reflector.

Dan

That government is best, which governs the least, because its people discipline themselves. Thomas Jefferson

Sent from my somewhat brighter, larger, electronic leash.

On Mar 27, 2013, at 21:09, w6mqi <w6mqi@...> wrote:

> Hi Garey
> Just wanted say I've been spoiled by your nice Drake service CD's which I purchased from you about a year ago. I recently picked up a basket case Johnson Viking Range which I'm in the process of bringing back to life. I found the the manuals which were available to be good, but lacked the photo detail that your CD's provide, so I asked around for anyone who might have some high res photos of the component side and received nothing but grief from people Geez those Johnson guys sure are snobs about a rig that's not even all that good. Anyway looking forward to your next edition Drake CD's two thumbs up....
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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

Messages in this topic (5)

1b. Re: Garey K4OAH Thanks.
Posted by: "Dan Galligan" w3rxo@... w3rxo
Date: Thu Mar 28, 2013 9:20 am ((PDT))

Steve/Richard,
Again, I don't wish to sound as if I am bashing any particular group's reflector, so, I'll leave out specific group names. They are ALL generally helpful, some more than others. But, as helpful as they may be, they sometimes seem petty, or curt, when the moderator will demand an "End of thread", or comment in a snarky tone, how it is not a reflector for (insert the off-topic here), on an otherwise interesting and informative topic. Whereas, around here, we seem to "get it", that we are generally all ham radio operators. As such, we enjoy talking about things, and as is human nature, topics, can, and frequently do, go off in a tangential manner. I have rarely seen the moderators here, tell folks that a discussion has gone too far off topic, and things need to wrap up. But, when I have seen it, it is always done, with courtesy, and it was the right thing to do at the time.

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So, yes, this is a very long way of explaining how much I appreciate moderators, who do a FINE job, that is very thankless, for the most part. We have a golden group, here, and one I am very grateful, for it's existence, and for the wealth of knowledge, among people, so willing to share that knowledge, for the good of the hobby.

73,
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W3RXO/W6
Pomona, CA
DM14cb

REAL radios glow in the dark, and have lethal voltages present.

Sent from my iPad.

[Non-text portions of this message have been removed]

Messages in this topic (5)

Yahoo! Groups Links

12892. RE: [DrakeRadio] Digest Number 1926

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-29 17:24:24 UTC
From: <w1es1982@...>
Topic: 12891 Message: 12892

Were those the Kafka fan reflectors?

Sorry - I couldn't help it. Me bad...

Steve, W1ES/4

---- Bob DeHaney <bobdehaney@...> wrote:
> And then there are groups where you are banned with no warning, no
> communication of any kind, no information as to why one was banned, and no
> response to any emails.
>
> Vy 73 de Bob DJ0RD/WU5T
>
> -----Original Message-----
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com]
> Sent: 29 March 2013 10:33
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Digest Number 1926
>
> There are 2 messages in this issue.
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> Topics in this digest:
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> From: Steve Wedge
> 1b. Re: Garey K4OAH Thanks.
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> Subject: Re: [DrakeRadio] Garey K4OAH Thanks.
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> > W6MQI
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> Posted by: "Dan Galligan" w3rxo@... w3rxo
> Date: Thu Mar 28, 2013 9:20 am ((PDT))
>
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> Messages in this topic (5)
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12893. My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 00:39:36 UTC
From: Howard Traxler
Topic: 12538 Message: 12893

Thanks Garey, for the encouragement. I did take off the final cage (4 screws and 2 shafts) and the protection lamp shows close to 0 ohms. I think that means it's OK. I'd sure like to clean the dust off of those finals. It must be 1/16" thick and sure smells when they start to get warm.

Yes, (Got the XYL to take a look) when I key the PTT I was getting 100ma (I think that's what the 1 on the meter indicates). I set the bias down a bit so I'm now getting abut 150. I think that's what the mark between the 1 and 2 is for.

Seems like I must be losing signal at an RF or mixer stage. What can I check next.

Thank you very much for your suggestions. I sure hope I can get this one working without sending it away.

Thanks and 73,
de
Howard, WA9RYF
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Sunday, March 24, 2013 10:32 AM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

OK.

The 9.00 MHz is good, and 'should' be heard on all bands. That is the Carrier Oscillator. When you switch to CW or AM, it is 'moved' about 1 kHz lower in frequency.

The 21.5 MHz is good, and 'should' be heard only on 40M. That is the Heterodyne Oscillator. It will be different for each band.

When the PTO is tuned to the '000' point, it should be heard at 5 MHz. This is a tunable oscillator, and so may be a few kHz, (up to 10,) either side of this frequency.

The final cage isn't that hard to remove, the TUNE and LOAD shafts just pull out of the couplers that go through the side, and then remove the small screws. Obviously power off and power supply unplugged.

You didn't answer whether you had PA Bias current when you closed the PTTas described in Section 4, para A in the manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Hi Garey and thanks. Finally got to check out the local oscilators.
>
> Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
>
> Garey: the crystal oscillator runs at 21.5 MHz.
> Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
>
> I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
>
> Further suggestions, please? Thank you.
>
> Howard, WA9RYF
>
>
>
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, March 13, 2013 11:53 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> the crystal oscillator runs at 21.5 MHz.
>
> Yes, only PA tubes inside the cage.
>
> Don't remove tubes from sockets, just rock them back and forth a little one at a time.
>
> Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>

>
> Howard Traxler wrote:
> > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> >
> > Are the three finals the only tubes in the final cage?
> >
> > It's hard to physically check all the tubes. There are so many I get confused.
> >
> > Would that protection bulb be inside the cage with the finals?
> >
> > What frequency can I listen to to hear local oscilators from the receiver?
> >
> > These answers will give me something to do a while. Thanks to you and Don.
> >
> > 73, WA9RYF
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, March 13, 2013 9:57 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > Howard -
> >
> > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > #47 bulb, just with a bi-pin base.
> >
> > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> > problem if that is the cause.
> >
> > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > rigs with ALL connected to their own antenna, the bulb isn't necessary.
> >
> > I assume it wasn't the slide switch on the side.?
> >
> > Do you have PA idle current when PTT is closed?
> >
> > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> > times. Not the PA tubes.

> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Howard Traxler wrote:
> > > Thanks Don, I'll give it a "look". What are the properties of the bulb? Can I burn it out with an ohm meter or continuity tester? If it is burned out, I bet it's not a good idea to just twist the wires together, hi hi.
> > >
> > > 73,
> > > Howard
> > > ----- Original Message -----
> > > From: Don Cunningham
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Tuesday, March 12, 2013 9:56 PM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >
> > >
> > >
> > > Well, there are two locations for the bulb and my old brain forgets which one is which. One of the TR4's it is under the chassis, near the antenna connector and relay, the other one is in the final compartment. Look closely in that area very near the antenna connector and you will see it plugged into a socket. The contacts are most suspect, unless you had a transmitter too close and blew the bulb.
> > > 73,
> > > Don
> > >
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[Non-text portions of this message have been removed]

12894. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 15:57:53 UTC
From: Garey Barrell
Topic: 12538 Message: 12894

Howard -

First, the BIAS should be set for 0.1A, not 1.5A! The idle current
should be set to 0.1A.

Listening on a separate receiver, can you HEAR a signal on 40M when
you key the transmitter, even a very weak one.

Using your external receiver with a little sample loop for an antenna,
put the loop near V4 and see if you can hear a 7.000 MHz signal with
the PTO of the TR-4 set to 000. This would be in TUNE mode, -x on the
SIDEBAND switch. If you can, see if it's stronger at V6. Keep an eye
on the PLATE meter to make sure the plate current doesn't jump up
during this test.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> PTTas described in Section 4, para A in the manual.
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>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
> > Hi Garey and thanks. Finally got to check out the local oscilators.
> >
> > Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> > Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
> >
> > Garey: the crystal oscillator runs at 21.5 MHz.
> > Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
> >
> > I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
> >
> > Further suggestions, please? Thank you.
> >
> > Howard, WA9RYF

> >
> >
> >
> >
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, March 13, 2013 11:53 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> > the crystal oscillator runs at 21.5 MHz.
> >
> > Yes, only PA tubes inside the cage.
> >
> > Don't remove tubes from sockets, just rock them back and forth a little one at a time.
> >
> > Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Howard Traxler wrote:
> > > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> > >
> > > Are the three finals the only tubes in the final cage?
> > >
> > > It's hard to physically check all the tubes. There are so many I get confused.
> > >
> > > Would that protection bulb be inside the cage with the finals?
> > >
> > > What frequency can I listen to to hear local oscilators from the receiver?
> > >
> > > These answers will give me something to do a while. Thanks to you and Don.
> > >
> > > 73, WA9RYF
> > > ----- Original Message -----
> > > From: Garey Barrell
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Wednesday, March 13, 2013 9:57 AM
> > > Subject: Re: [DrakeRadio] My non-working TR-4

> > >
> > >
> > >
> > > Howard -
> > >
> > > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > > #47 bulb, just with a bi-pin base.
> > >
> > > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> > > problem if that is the cause.
> > >
> > > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > > rigs with ALL connected to their own antenna, the bulb isn't necessary.
> > >
> > > I assume it wasn't the slide switch on the side.?
> > >
> > > Do you have PA idle current when PTT is closed?
> > >
> > > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> > > times. Not the PA tubes.
> > >
>

12895. RV7 Dial Mechanism Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 19:45:02 UTC
From: w9dz
Topic: 12895 Message: 12895

I recently obtained an RV7 that was advertised on QTH.COM. It looks good and it's electrical operation is fine.

My problem is with the inner-most circular dial. When the the 'OO' on the outer dial is aligned over the index mark I am rougly half way between 100 KHz marks on the inner dial. Calibration on the outer dial seems to be OK.

I have removed the case to take a look but really can't see much and don't want to start taking things apart running the risk of not getting it back together correctly (that happens to me sometimes!).

Is the inner dial held with a set screw? Anyone here tackled this before?

Thanks

Allen, W9DZ

12896. Re: [DrakeRadio] TR7 audio response?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 20:10:48 UTC
From: Jim Shorney
Topic: 12805 Message: 12896

On Mon, 25 Mar 2013 05:35:47 -0000, ka8asn wrote:

>Or any modifications that can be made to the audio board.

To address the second question, here are links to some audio stage mods:

http://members.ziggo.nl/cmulder/drake.htm

http://www.dl7maj.de/7-Line.html

I have done some of this, including replacing the transistors with BC549B, and the results are encouraging. Interestingly, I arrived at the BC549B as a sub independantly of PA0CMU's experiments; it is a good low-noise device. Bob Loving, K9JU, has also done some interesting work with added active filtering, but I don't think he has published any of it on the internet. You might try contacting him directly. You will need some extra filtering to really eliminate all of the hiss.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

12897. Re: [DrakeRadio] RV7 Dial Mechanism Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 20:56:12 UTC
From: Jim Shorney
Topic: 12895 Message: 12897

Look at the bottom picture on this page:

http://www.wb4hfn.com/DRAKE/DrakeArticles/InsideTheTR7/Inside_The_TR7-04.htm

You will see a spring loaded metal arm with an adjusting screw that rests against the lower portion of the frame. Pushing the top of the arm towards the center of the PTO assembly will release the idler gear so one of the dials may be moved without moving anyting else. If this doesn't get you where you need to be, further surgery will be required.

73

-Jim
NU0C

On Sat, 30 Mar 2013 19:45:02 -0000, w9dz wrote:

>I recently obtained an RV7 that was advertised on QTH.COM. It looks good and it's electrical operation is fine.

>My problem is with the inner-most circular dial. When the the 'OO' on the outer dial is aligned over the index mark I am rougly half way between 100 KHz marks on the inner dial. Calibration on the outer dial seems to be OK.

>I have removed the case to take a look but really can't see much and don't want to start taking things apart running the risk of not getting it back together correctly (that happens to me sometimes!).

>Is the inner dial held with a set screw? Anyone here tackled this before?

>Thanks

>Allen, W9DZ
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

12898. Re: RV7 Dial Mechanism Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-30 21:22:04 UTC
From: w9dz
Topic: 12895 Message: 12898

Thanks Jim. Appreciate the tip.

73,

Allen, W9DZ

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
> Look at the bottom picture on this page:
>
> http://www.wb4hfn.com/DRAKE/DrakeArticles/InsideTheTR7/Inside_The_TR7-04.htm
>

12899. Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 11:54:29 UTC
From: Fraser
Topic: 12899 Message: 12899

Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.

First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.

On 10, I can transmit and get power, but there's nothing on receive. A few big signals on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands except the three 10m band positions.

Would this be a band switch issue, or are the 10m crystals dead?

12900. No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 13:02:43 UTC
From: claudewelsch
Topic: 12900 Message: 12900

I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
On another receiver, I can hear the signal on 80 m resp. 40 m.
On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
What is wrong here?
Does anybody know?
Happy Easter!

Claude
LX1EX

12901. Re: [DrakeRadio] Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 14:43:51 UTC
From: Garey Barrell
Topic: 12899 Message: 12901

Fraser -

Certainly could be a bandswitch issue. Check contacts around the BAND oscillator as that's the only thing I can think of that would affect only ONE band.

Have you tried adjusting L2? L3 and L4 are 'incremental' coils, tiny little air-wound coils between the switch fixed contact terminals. Make sure L3 and L4 haven't been damaged. Meter on the TP and adjust L2 to see if you can get any negative voltage. Possibly weak V1. I doubt seriously that all three 10M crystals are defective.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fraser wrote:
> Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.
>
> First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.
>
> On 10, I can transmit and get power, but there's nothing on receive. A few big signals on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands except the three 10m band positions.
>
> Would this be a band switch issue, or are the 10m crystals dead?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

12902. Re: Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 15:50:13 UTC
From: Fraser
Topic: 12899 Message: 12902

Thanks Garey, I'll have it on the bench this week and see what I can find.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Fraser -
>
> Certainly could be a bandswitch issue. Check contacts around the BAND
> oscillator as that's the only thing I can think of that would affect
> only ONE band.
>
> Have you tried adjusting L2? L3 and L4 are 'incremental' coils, tiny
> little air-wound coils between the switch fixed contact terminals.
> Make sure L3 and L4 haven't been damaged. Meter on the TP and adjust
> L2 to see if you can get any negative voltage. Possibly weak V1. I
> doubt seriously that all three 10M crystals are defective.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Fraser wrote:
> > Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.
> >
> > First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.
> >
> > On 10, I can transmit and get power, but there's nothing on receive. A few big signals
on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands
except the three 10m band positions.
> >
> > Would this be a band switch issue, or are the 10m crystals dead?
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
> >
> >
>

12903. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 16:42:50 UTC
From: milton_valerio
Topic: 12900 Message: 12903

if I were you, I will start following the aligning steps from the manual.

--- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@...> wrote:
>
> I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> On another receiver, I can hear the signal on 80 m resp. 40 m.
> On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> What is wrong here?
> Does anybody know?
> Happy Easter!
>
> Claude
> LX1EX
>

12904. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 16:46:51 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 12904

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

12905. Re: [DrakeRadio] No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 16:50:26 UTC
From: Jim Shorney
Topic: 12900 Message: 12905

It sounds like the PA needs to be neutralized.

73

-Jim
NU0C

On Sun, 31 Mar 2013 13:02:43 -0000, claudewelsch wrote:

>I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
>On another receiver, I can hear the signal on 80 m resp. 40 m.
>On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
>On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
>On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
>What is wrong here?
>Does anybody know?
>Happy Easter!
>
>Claude
>LX1EX
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

12906. Re: [DrakeRadio] No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 16:53:49 UTC
From: Mark Pilant
Topic: 12900 Message: 12906

Claude, in addition to the other suggestions (and given my recent experience bringing my TR-4 back to life) I would suggest giving all the various contacts (switches, tubes and sockets, crystals, etc.) a contact cleaner treatment. Mine had all manner of strange problems "corrected" by thoroughly cleaning the tubes and sockets.

73

- Mark N1VQW

12907. RE: [DrakeRadio] TR7 audio response?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 17:13:49 UTC
From: Michael J Trussell
Topic: 12805 Message: 12907

Thank You Jim, for your information. I will study the information on the link you sent.

Michael J Trussell

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Jim Shorney
Sent: Saturday, March 30, 2013 4:11 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR7 audio response?

On Mon, 25 Mar 2013 05:35:47 -0000, ka8asn wrote:

>Or any modifications that can be made to the audio board.

To address the second question, here are links to some audio stage mods:

http://members.ziggo.nl/cmulder/drake.htm

http://www.dl7maj.de/7-Line.html

I have done some of this, including replacing the transistors with BC549B, and
the results are encouraging. Interestingly, I arrived at the BC549B as a sub independantly of PA0CMU's experiments; it is a good low-noise device. Bob Loving, K9JU, has also done some interesting work with added active filtering,
but I don't think he has published any of it on the internet. You might try contacting him directly. You will need some extra filtering to really eliminate
all of the hiss.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

[Non-text portions of this message have been removed]

12908. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 19:11:39 UTC
From: claudewelsch
Topic: 12900 Message: 12908

Thanks Jim, but I tried this already.

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
>
> It sounds like the PA needs to be neutralized.
>
> 73
>
> -Jim
> NU0C
>
>
> On Sun, 31 Mar 2013 13:02:43 -0000, claudewelsch wrote:
>
> >I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> >On another receiver, I can hear the signal on 80 m resp. 40 m.
> >On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> >On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> >On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> >What is wrong here?
> >Does anybody know?
> >Happy Easter!
> >
> >Claude
> >LX1EX
> >
> >
>
> --
> "There's something out of place ☐ let's go and poke it with a stick." ☐ The Doctor, "Amy's Choice"
>

12909. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 19:13:20 UTC
From: claudewelsch
Topic: 12900 Message: 12909

Thanks for the tip! That's the first thing I did, but if you read well, this doesn't work here!

--- In DrakeRadio@yahoogroups.com, "milton_valerio" <milton_valerio@...> wrote:
>
> if I were you, I will start following the aligning steps from the manual.
>
>
>
> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
> >
> > I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> > On another receiver, I can hear the signal on 80 m resp. 40 m.
> > On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> > On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> > On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> > What is wrong here?
> > Does anybody know?
> > Happy Easter!
> >
> > Claude
> > LX1EX
> >
>

12910. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 19:15:21 UTC
From: claudewelsch
Topic: 12900 Message: 12910

Thanks Mark. I did this with the bandswitch but no change...

--- In DrakeRadio@yahoogroups.com, Mark Pilant <n1vqw@...> wrote:
>
> Claude, in addition to the other suggestions (and given my recent
> experience bringing my TR-4 back to life) I would suggest giving
> all the various contacts (switches, tubes and sockets, crystals,
> etc.) a contact cleaner treatment. Mine had all manner of strange
> problems "corrected" by thoroughly cleaning the tubes and sockets.
>
> 73
>
> - Mark N1VQW
>

12911. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 19:18:06 UTC
From: claudewelsch
Topic: 12900 Message: 12911

I found a solution!

In fact I have a T-4X around that does correctly tune in. So I took a closer look at the T-4X. There the solder joints at L8 and going to the resistors/selfs to the three finals' plates as well as the solder joints on L9 and C95, the LOAD capacitor, had been recenly redone.
I decided to do the same, removing the cage completely as well as the screws fixing L9 and completely renewed all the solder joints.
Now tuning works great, with plenty of power, on all bands!

--- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@...> wrote:
>
> I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> On another receiver, I can hear the signal on 80 m resp. 40 m.
> On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> What is wrong here?
> Does anybody know?
> Happy Easter!
>
> Claude
> LX1EX
>

12912. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-03-31 21:29:25 UTC
From: Mark Pilant
Topic: 12900 Message: 12912

> I did this with the bandswitch but no change...

The thing I found, in my case, was not the bandswitch which needed cleaning but the tube pins and sockets.

Although, it is good to hear doing the solder joints over seems to have fixed your problem.

73

- Mark N1VQW

12913. Someone spike his Foster's?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 11:57:27 UTC
From: Steve Wedge
Topic: 12913 Message: 12913

http://www.ebay.com/itm/Drake-Low-Pass-Filter-/290890689336?pt=LH_DefaultDomain_0&hash=item43ba6fab38

Methinks the decimal moved while he was distracted

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12914. Re: [DrakeRadio] No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 20:12:55 UTC
From: Garey Barrell
Topic: 12900 Message: 12914

Claude -

Are you able to set the PA IDLE current per the instructions in
Section IV. Para. A of the manual?

It sounds like the PA is oscillating on 10M where you are getting 100W
and 600 mA of plate current.

If you haven't already, go through and check all screws to ensure they
are tight, especially tube socket, terminal strip, and shield hardware.

Are all tubes heating properly?

If still a problem, I would strongly suggest disconnecting the PA
Screen supply. The terminal is across from the filament fuse. There
are a group of five terminals through the PA underchassis shield. The
first one of the groupfrom the rear wall of the chassis, is the +650
VDC, the second one is the Screen supply. This one needs to be
disconnected CAREFULLY. Be sure and remove solder and do not apply
any side stress on the ceramic feedthrough capacitor as they WILL
crack. Once this is done, you can key the transmitter and work on all
stages without damaging the PA tubes with too much current.

If the receiver is working correctly on all bands, all but V4 and V6
are 'almost' eliminated as the source of trouble. Voltage checks of
these stages will eliminate DC problems.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> On another receiver, I can hear the signal on 80 m resp. 40 m.
> On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> What is wrong here?

> Does anybody know?
> Happy Easter!
>
> Claude
> LX1EX
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> Yahoo! Groups Links
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12915. Re: Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 20:37:45 UTC
From: Fraser
Topic: 12899 Message: 12915

Garey,

For 40 and 15, I can peak L1 and L5 for max negative voltage. When I switch to 10m, the voltage flips to positive ???

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Fraser -
>
> Certainly could be a bandswitch issue. Check contacts around the BAND
> oscillator as that's the only thing I can think of that would affect
> only ONE band.
>
> Have you tried adjusting L2? L3 and L4 are 'incremental' coils, tiny
> little air-wound coils between the switch fixed contact terminals.
> Make sure L3 and L4 haven't been damaged. Meter on the TP and adjust
> L2 to see if you can get any negative voltage. Possibly weak V1. I
> doubt seriously that all three 10M crystals are defective.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Fraser wrote:
> > Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.
> >
> > First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.
> >
> > On 10, I can transmit and get power, but there's nothing on receive. A few big signals on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands except the three 10m band positions.
> >
> > Would this be a band switch issue, or are the 10m crystals dead?
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12916. NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 20:39:06 UTC
From: Steve Wedge
Topic: 12916 Message: 12916

Too rich for my blood, but assuming this is real, it's worth the price due to the rarity (IMHO). It's like finding a 40 year old car with 50 miles on it.

http://www.eham.net/classifieds/detail/401349

I have no interest in this transaction and only post it here due to the rarity...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12917. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 20:50:35 UTC
From: Geoffrey S. Mendelson
Topic: 12916 Message: 12917

On 04/01/2013 11:39 PM, Steve Wedge wrote:
> Too rich for my blood, but assuming this is real, it's worth the price
> due to the rarity (IMHO). It's like finding a 40 year old car with 50
> miles on it.

You need to go back to the day they were made and seal 8 of them behind
a brick wall in a dry basement in Paris. :-)

(If you are a Doctor Who fan, you get it and if not, I apologize).

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

12918. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 20:55:42 UTC
From: Steve Wedge
Topic: 12916 Message: 12918

Yeah, and I should have put my '57 Bel Air convertible in a barn when I had it back in 1977, instead of selling it for $350. Ugh.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Geoffrey S. Mendelson
Sent: Monday, April 01, 2013 4:50 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] NIB R-4C

On 04/01/2013 11:39 PM, Steve Wedge wrote:
> Too rich for my blood, but assuming this is real, it's worth the price
> due to the rarity (IMHO). It's like finding a 40 year old car with 50
> miles on it.

You need to go back to the day they were made and seal 8 of them behind
a brick wall in a dry basement in Paris. :-)

(If you are a Doctor Who fan, you get it and if not, I apologize).

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

[Non-text portions of this message have been removed]

12919. Re: [DrakeRadio] Re: Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 21:00:23 UTC
From: Garey Barrell
Topic: 12899 Message: 12919

Fraser -

That just means the oscillator is not running. Have you subbed the tube? If you don't have another, swap with V3. If no help, swap back.

I would check with an ohmmeter between all the switch tags for the 10M crystals, (the ones with the incremental coils,) to makesure there is 0 ohms from one end to the other. Check L2 and make sure it's not open.

Assuming adjusting L2 has NO effectI would then take each crystal and plug into the third 10M socket one at a timeand see if you get any negative voltage. The TP is at RF ground, so the type of meter shouldn't have any effect.

If you have another crystal anywhere near40 - 50 MHz you could try it just to confirm. The 35.5 crystal 'MIGHT' work, but probably not. If you can borrow a crystal from someone with a TR-3 or 4. It's certainly possible, but I just can't think all three crystals are bad....

Last resort is C1 / C2 if one isleaky or off value it may have disturbed the division ratioat the high end.

Last, last resort is order a new crystal from International Crystal Mfrs and see what happens!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fraser wrote:
> Garey,
>
> For 40 and 15, I can peak L1 and L5 for max negative voltage. When I switch to 10m, the voltage flips to positive ???
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Fraser -
>>
>> Certainly could be a bandswitch issue. Check contacts around the BAND
>> oscillator as that's the only thing I can think of that would affect
>> only ONE band.
>>

>> Have you tried adjusting L2? L3 and L4 are 'incremental' coils, tiny
>> little air-wound coils between the switch fixed contact terminals.
>> Make sure L3 and L4 haven't been damaged. Meter on the TP and adjust
>> L2 to see if you can get any negative voltage. Possibly weak V1. I
>> doubt seriously that all three 10M crystals are defective.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Fraser wrote:
>>> Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.
>>>
>>> First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.
>>>
>>> On 10, I can transmit and get power, but there's nothing on receive. A few big signals on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands except the three 10m band positions.
>>>
>>> Would this be a band switch issue, or are the 10m crystals dead?
>>>
>>>

12920. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 21:10:29 UTC
From: Garey Barrell
Topic: 12916 Message: 12920

I think that's wishful thinking. That doesn't mean some nut out there
with more money than brains won'tpay it, look at unbuilt Heathkits!
:-) Maybe someone will buy it and put it in storage without opening it!!!

It's not all that big a deal. Not really similar to a 1977 car with
50 miles on it, cause the receiver doesn't physically deteriorate
mechanically like a car, and is certainly a LOT cheaper to 'renew'.
But the biggest thing is there are still dozens ? hundreds ?
thousands? still out there that are in effectively unmolested'mint'
condition. Now if it was a 1-A.........

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Too rich for my blood, but assuming this is real, it's worth the price due to the rarity
(IMHO). It's like finding a 40 year old car with 50 miles on it.
>
> http://www.eham.net/classifieds/detail/401349
>
> I have no interest in this transaction and only post it here due to the rarity...
>

12921. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 21:23:50 UTC
From: Edward
Topic: 12916 Message: 12921

Too bad it's not a higher serial number like 29k. Still happy with my Sherwood 29k C line, which is currently en route to me in Saudi. I will be QRV as 7Z1ES and will put it through its paces.

73,
Ed NI6S

Sent from my iPhone

On Apr 2, 2013, at 0:10, Garey Barrell <k4oah@...> wrote:

> I think that's wishful thinking. That doesn't mean some nut out there
> with more money than brains won'tpay it, look at unbuilt Heathkits!
> :-) Maybe someone will buy it and put it in storage without opening it!!!
>
> It's not all that big a deal. Not really similar to a 1977 car with
> 50 miles on it, cause the receiver doesn't physically deteriorate
> mechanically like a car, and is certainly a LOT cheaper to 'renew'.
> But the biggest thing is there are still dozens ? hundreds ?
> thousands? still out there that are in effectively unmolested'mint'
> condition. Now if it was a 1-A.........
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Steve Wedge wrote:
>> Too rich for my blood, but assuming this is real, it's worth the price due to the rarity (IMHO). It's like finding a 40 year old car with 50 miles on it.
>>
>> http://www.eham.net/classifieds/detail/401349
>>
>> I have no interest in this transaction and only post it here due to the rarity...
>
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> Yahoo! Groups Links
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12922. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-01 22:55:38 UTC
From: Les Zwiebel WB6ORZ
Topic: 12916 Message: 12922

Heck, at that price, gimme' two!
   (((73)))
   Less

-------- Original message --------
From: Garey Barrell <k4oah@mindspring.com>
Date: 04/01/2013 2:10 PM (GMT-08:00)
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] NIB R-4C

I think that's wishful thinking. That doesn't mean some nut out there
with more money than brains won'tpay it, look at unbuilt Heathkits!
:-) Maybe someone will buy it and put it in storage without opening it!!!

It's not all that big a deal. Not really similar to a 1977 car with
50 miles on it, cause the receiver doesn't physically deteriorate
mechanically like a car, and is certainly a LOT cheaper to 'renew'.
But the biggest thing is there are still dozens ? hundreds ?
thousands? still out there that are in effectively unmolested'mint'
condition. Now if it was a 1-A.........

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Too rich for my blood, but assuming this is real, it's worth the price due to the rarity
(IMHO). It's like finding a 40 year old car with 50 miles on it.
>
> http://www.eham.net/classifieds/detail/401349
>
> I have no interest in this transaction and only post it here due to the rarity...
>

[Non-text portions of this message have been removed]

12923. Re: Mostly working TR-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 00:02:56 UTC
From: Fraser
Topic: 12899 Message: 12923

Garey,

I started swapping V1 for some other 6EA8's that I had and finally got some negative voltage, and I can tweak it with L2.

I noticed some intermittent voltages as I wobbled the tube, so I think I will need to tighten up the pins.

Thanks for the hints.

Fraser

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Fraser -
>
> That just means the oscillator is not running. Have you subbed the
> tube? If you don't have another, swap with V3. If no help, swap back.
>
> I would check with an ohmmeter between all the switch tags for the 10M
> crystals, (the ones with the incremental coils,) to makesure there is
> 0 ohms from one end to the other. Check L2 and make sure it's not open.
>
> Assuming adjusting L2 has NO effectI would then take each crystal and
> plug into the third 10M socket one at a timeand see if you get any
> negative voltage. The TP is at RF ground, so the type of meter
> shouldn't have any effect.
>
> If you have another crystal anywhere near40 - 50 MHz you could try it
> just to confirm. The 35.5 crystal 'MIGHT' work, but probably not. If
> you can borrow a crystal from someone with a TR-3 or 4. It's
> certainly possible, but I just can't think all three crystals are bad....
>
> Last resort is C1 / C2 if one isleaky or off value it may have
> disturbed the division ratioat the high end.
>
> Last, last resort is order a new crystal from International Crystal
> Mfrs and see what happens!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

> Fraser wrote:
> > Garey,
> >
> > For 40 and 15, I can peak L1 and L5 for max negative voltage. When I switch to 10m, the voltage flips to positive ???
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Fraser -
> >>
> >> Certainly could be a bandswitch issue. Check contacts around the BAND
> >> oscillator as that's the only thing I can think of that would affect
> >> only ONE band.
> >>
> >> Have you tried adjusting L2? L3 and L4 are 'incremental' coils, tiny
> >> little air-wound coils between the switch fixed contact terminals.
> >> Make sure L3 and L4 haven't been damaged. Meter on the TP and adjust
> >> L2 to see if you can get any negative voltage. Possibly weak V1. I
> >> doubt seriously that all three 10M crystals are defective.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> Fraser wrote:
> >>> Spent the weekend's WPX putting my "new to me" TR-3 through it's paces.
> >>>
> >>> First the good news, I made a bunch of Stateside and DX contacts on 15, 20, 40 and 80.
> >>>
> >>> On 10, I can transmit and get power, but there's nothing on receive. A few big signals on my Icom, but nothing at all on the TR-3. No CAL signal but CAL does work on all bands except the three 10m band positions.
> >>>
> >>> Would this be a band switch issue, or are the 10m crystals dead?
> >>>
> >>>
> >
>

12924. Re: [DrakeRadio] NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 00:23:43 UTC
From: yash@aol.com
Topic: 12916 Message: 12924

Garey
there is a" decent" condition tempo 2020 for 1500.00 , not even new in the box. Hope he does not sell to a friend for that price.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Apr 1, 2013 5:10 pm
Subject: Re: [DrakeRadio] NIB R-4C

I think that's wishful thinking. That doesn't mean some nut out there
with more money than brains won'tpay it, look at unbuilt Heathkits!
:-) Maybe someone will buy it and put it in storage without opening it!!!

It's not all that big a deal. Not really similar to a 1977 car with
50 miles on it, cause the receiver doesn't physically deteriorate
mechanically like a car, and is certainly a LOT cheaper to 'renew'.
But the biggest thing is there are still dozens ? hundreds ?
thousands? still out there that are in effectively unmolested'mint'
condition. Now if it was a 1-A.........

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

Steve Wedge wrote:
> Too rich for my blood, but assuming this is real, it's worth the price due to the rarity (IMHO). It's like finding a 40 year old car with 50 miles on it.
>
> http://www.eham.net/classifieds/detail/401349
>
> I have no interest in this transaction and only post it here due to the rarity...
>

[Non-text portions of this message have been removed]

12925. Drake TR-3 with mobile and base power supply/

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 00:37:30 UTC
From: w0szv
Topic: 12925 Message: 12925

Fellow members, I need to know what the worth is on a working TR-3 with a working base power supply and a unknown condition mobile power supply. the TR-3 has just had a capacitor kit put in it and is working. It is excess to my needs and I don't want to overprice it or just give it away to someone trying to lowball it. any responses should be by my e-mail and not by the reflector to keep from jamming it up with a lot of unneeded info.
thanks
Eldon Scott
w0szv

12926. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 10:00:40 UTC
From: claudewelsch
Topic: 12900 Message: 12926

Thank you Garey for the detailed instructions.

As I said I resoldered all the final self and capacitor joints and this did the job!

Claude

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> Are you able to set the PA IDLE current per the instructions in
> Section IV. Para. A of the manual?
>
> It sounds like the PA is oscillating on 10M where you are getting 100W
> and 600 mA of plate current.
>
> If you haven't already, go through and check all screws to ensure they
> are tight, especially tube socket, terminal strip, and shield hardware.
>
> Are all tubes heating properly?
>
> If still a problem, I would strongly suggest disconnecting the PA
> Screen supply. The terminal is across from the filament fuse. There
> are a group of five terminals through the PA underchassis shield. The
> first one of the groupfrom the rear wall of the chassis, is the +650
> VDC, the second one is the Screen supply. This one needs to be
> disconnected CAREFULLY. Be sure and remove solder and do not apply
> any side stress on the ceramic feedthrough capacitor as they WILL
> crack. Once this is done, you can key the transmitter and work on all
> stages without damaging the PA tubes with too much current.
>
> If the receiver is working correctly on all bands, all but V4 and V6
> are 'almost' eliminated as the source of trouble. Voltage checks of
> these stages will eliminate DC problems.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and

TUNE.
> > On another receiver, I can hear the signal on 80 m resp. 40 m.
> > On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> > On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> > On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> > What is wrong here?
> > Does anybody know?
> > Happy Easter!
> >
> > Claude
> > LX1EX
> >
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> > Yahoo! Groups Links
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12927. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 10:28:58 UTC
From: claudewelsch
Topic: 12900 Message: 12927

Hello Garey,

I have two further problems with my TR-4, maybe you can help:

1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!

2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
With the Sideband switch on the left position i have:
80 m LOWER correct
40 m UPPER NOT correct
20 m LOWER NOT correct
15 m UPPER correct
10 m UPPER correct
10 m UPPER correct
10 m UPPER correct

Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?

73s
LX1EX
Claude

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> Are you able to set the PA IDLE current per the instructions in
> Section IV. Para. A of the manual?
>
> It sounds like the PA is oscillating on 10M where you are getting 100W
> and 600 mA of plate current.
>
> If you haven't already, go through and check all screws to ensure they
> are tight, especially tube socket, terminal strip, and shield hardware.
>
> Are all tubes heating properly?
>
> If still a problem, I would strongly suggest disconnecting the PA
> Screen supply. The terminal is across from the filament fuse. There
> are a group of five terminals through the PA underchassis shield. The
> first one of the groupfrom the rear wall of the chassis, is the +650
> VDC, the second one is the Screen supply. This one needs to be
> disconnected CAREFULLY. Be sure and remove solder and do not apply

> any side stress on the ceramic feedthrough capacitor as they WILL
> crack. Once this is done, you can key the transmitter and work on all
> stages without damaging the PA tubes with too much current.
>
> If the receiver is working correctly on all bands, all but V4 and V6
> are 'almost' eliminated as the source of trouble. Voltage checks of
> these stages will eliminate DC problems.
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> claudewelsch wrote:
> > I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> > On another receiver, I can hear the signal on 80 m resp. 40 m.
> > On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> > On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> > On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> > What is wrong here?
> > Does anybody know?
> > Happy Easter!
> >
> > Claude
> > LX1EX
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> > Yahoo! Groups Links
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12928. Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 13:46:57 UTC
From: km5z_mike
Topic: 12916 Message: 12928

And then you buy it, take it home, un-box it,
power it on and instantaneously lose $2500.

Oh, if I were ONLY that rich.

Mike Y, KM5Z
Dallas, Texas

--- In DrakeRadio@yahoogroups.com, Les Zwiebel WB6ORZ <wb6orz@...> wrote:
>
> Â Â Heck, at that price, gimme' two!
> Â Â (((73)))
> Â Â Less
>
> -------- Original message --------
> From: Garey Barrell <k4oah@...>
> Date: 04/01/2013 2:10 PM (GMT-08:00)
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] NIB R-4C
>
> I think that's wishful thinking. That doesn't mean some nut out there
> with more money than brains won'tpay it, look at unbuilt Heathkits!
> :-) Maybe someone will buy it and put it in storage without opening it!!!

12929. Re: [DrakeRadio] Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 14:11:15 UTC
From: Paul Christensen
Topic: 12916 Message: 12929

At some point someone has to open it, right? That would be an exciting moment for most any Drake collector.

An R-4C sitting in an unopened box may actually need more TLC than a unit that receives periodic use. PTO race bearing grease will have dried and congealed in the last 40 years of complete non-use. Band switch wafers may need cleaning/lubrication with DeOxit. So, the excitement from the "out-of-the-box-experience" might be a bit dampened once the unit is pugged in and operating.

Paul, W9AC

----- Original Message -----
From: km5z_mike
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, April 02, 2013 9:46 AM
Subject: [DrakeRadio] Re: NIB R-4C

And then you buy it, take it home, un-box it,
power it on and instantaneously lose $2500.

Oh, if I were ONLY that rich.

Mike Y, KM5Z
Dallas, Texas

--- In DrakeRadio@

[Non-text portions of this message have been removed]

12930. RE: [DrakeRadio] Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 14:18:02 UTC
From: Terrell Hamilton
Topic: 12916 Message: 12930

Or, for that matter, is there REALLY an R4C in there? If you don't open it, there might as well be an old ARC-5 inside...

Terry K7WLD

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Paul Christensen
Sent: Tuesday, April 02, 2013 7:11 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: NIB R-4C

At some point someone has to open it, right? That would be an exciting moment for most any Drake collector.

An R-4C sitting in an unopened box may actually need more TLC than a unit that receives periodic use. PTO race bearing grease will have dried and congealed in the last 40 years of complete non-use. Band switch wafers may need cleaning/lubrication with DeOxit. So, the excitement from the "out-of-the-box-experience" might be a bit dampened once the unit is pugged in and operating.

Paul, W9AC

----- Original Message -----
From: km5z_mike
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Tuesday, April 02, 2013 9:46 AM
Subject: [DrakeRadio] Re: NIB R-4C

And then you buy it, take it home, un-box it,
power it on and instantaneously lose $2500.

Oh, if I were ONLY that rich.

Mike Y, KM5Z
Dallas, Texas

--- In DrakeRadio@

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12931. Re: [DrakeRadio] Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 14:26:18 UTC
From: Roger VE7LB
Topic: 12916 Message: 12931

It finally went to eBay where it sold for $1850, after three listings, on March 18. eBay item # 251247134351 .

73
Roger VE7LB

----- Original Message -----
From: Terrell Hamilton
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, April 02, 2013 7:18 AM
Subject: RE: [DrakeRadio] Re: NIB R-4C

Or, for that matter, is there REALLY an R4C in there? If you don't open it, there might as well be an old ARC-5 inside...

Terry K7WLD

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Paul Christensen
Sent: Tuesday, April 02, 2013 7:11 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: NIB R-4C

At some point someone has to open it, right? That would be an exciting moment for most any Drake collector.

An R-4C sitting in an unopened box may actually need more TLC than a unit that receives periodic use. PTO race bearing grease will have dried and congealed in the last 40 years of complete non-use. Band switch wafers may need cleaning/lubrication with DeOxit. So, the excitement from the "out-of-the-box-experience" might be a bit dampened once the unit is pugged in and operating.

Paul, W9AC

----- Original Message -----
From: km5z_mike
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Tuesday, April 02, 2013 9:46 AM
Subject: [DrakeRadio] Re: NIB R-4C

And then you buy it, take it home, un-box it,
power it on and instantaneously lose $2500.

Oh, if I were ONLY that rich.

Mike Y, KM5Z
Dallas, Texas

--- In DrakeRadio@

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12932. Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 15:52:55 UTC
From: Garey Barrell
Topic: 12900 Message: 12932

Claude -

OK. I guess I missed your 'fixed' message! Glad you have it going.

Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
should change from receiveto transmit. Possibly a spurious output
from the crystal? I'm at a loss, perhaps someone else will have an idea??

I don't know if your sideband reversal is related to the above
somehow, but it certainly is suspicious. My initial reaction would be
to leave the switch wiring alone, unless it shows evidence of being
'adjusted' by a previous owner. I would say that is highly unlikely.

There may be some connection with the fact that the LO is at 14.5
MHz..... I wonder if the transmit mixer has been mistuned to the LO
rather than 40M. So the receivemixer is tuned properly, but the
transmit mixer is not. Check the transmit mixer alignment relative to
40M for starters and let us know what you find.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Hello Garey,
>
> I have two further problems with my TR-4, maybe you can help:
>
> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
>
> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
> With the Sideband switch on the left position i have:
> 80 m LOWER correct
> 40 m UPPER NOT correct
> 20 m LOWER NOT correct
> 15 m UPPER correct
> 10 m UPPER correct
> 10 m UPPER correct
> 10 m UPPER correct
>

> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
>
> 73s
> LX1EX
> Claude
>

12933. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 16:07:04 UTC
From: claudewelsch
Topic: 12900 Message: 12933

Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?

LX1EX
Claude

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> OK. I guess I missed your 'fixed' message! Glad you have it going.
>
> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> should change from receiveto transmit. Possibly a spurious output
> from the crystal? I'm at a loss, perhaps someone else will have an idea??
>
> I don't know if your sideband reversal is related to the above
> somehow, but it certainly is suspicious. My initial reaction would be
> to leave the switch wiring alone, unless it shows evidence of being
> 'adjusted' by a previous owner. I would say that is highly unlikely.
>
> There may be some connection with the fact that the LO is at 14.5
> MHz..... I wonder if the transmit mixer has been mistuned to the LO
> rather than 40M. So the receivemixer is tuned properly, but the
> transmit mixer is not. Check the transmit mixer alignment relative to
> 40M for starters and let us know what you find.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > Hello Garey,
> >
> > I have two further problems with my TR-4, maybe you can help:
> >
> > 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!

> >
> > 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
> > With the Sideband switch on the left position i have:
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> > 40 m UPPER NOT correct
> > 20 m LOWER NOT correct
> > 15 m UPPER correct
> > 10 m UPPER correct
> > 10 m UPPER correct
> > 10 m UPPER correct
> >
> > Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> >
> > 73s
> > LX1EX
> > Claude
> >
>

12934. Re: [DrakeRadio] Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 16:27:33 UTC
From: Garey Barrell
Topic: 12916 Message: 12934

Shades of Schrodinger's Cat!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Or, for that matter, is there REALLY an R4C in there? If you don't open it,
> there might as well be an old ARC-5 inside...
>
>

12935. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 16:42:33 UTC
From: Mark Pilant
Topic: 12900 Message: 12935

Hi Claude.

> 2) The Sideband is not correct on all bands. I can of course switch
> with the Sideband switch, but should it not be automatically right.
> With the Sideband switch on the left position i have:
> 80 m LOWER correct
> 40 m UPPER NOT correct
> 20 m LOWER NOT correct
> 15 m UPPER correct
> 10 m UPPER correct
> 10 m UPPER correct
> 10 m UPPER correct

This is the same as my TR-4, and I believe my TR-3 as well; although I haven't used my TR-3 for a while and I'm rebuilding the AC-3 at the moment.

As far as I know (and understand) the Sideband switch doesn't really have defined settings. In other words, left is not LSB and right is not USB. The sideband used is indicated by the Upper and Lower panel lights, and the selection is by the Sideband switch.

The TR-4 manual indicates this as well (on page 21; Operation) where it says the Sideband control should be "On the desired sideband as shown by the indicator lights."

So I would say your switching is correct, but I have no idea why this was done instead of having one Sideband switch setting be LSB and the other be USB.

> Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?

I seem to recall having first seen definitions for these in "older" amateur radio handbooks (pick your favorite :-) I started using them from the late 1950s. (I learned a lot from my father's 1959 ARRL handbook.) I believe you will find:

CO = Carrier Oscillator
PTO = Permeability Tuned Oscillator
LO = Local Oscillator

73

- Mark N1VQW

12936. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 17:10:47 UTC
From: vacuuminded2@...
Topic: 12900 Message: 12936

CO= carrier oscillator
LO= local oscillator
PTO= your "VFO", which is technically not. PTO= Permeability Tune Oscillator. You are moving a slug thus changing inductance, not a capacitor like in a VFO.

Chris

Sent from my outdated iPhone wireless thingy

On Apr 2, 2013, at 11:07 AM, "claudewelsch" <clwelsch@...> wrote:

> Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
> Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
>
> LX1EX
> Claude
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
> >
> > Claude -
> >
> > OK. I guess I missed your 'fixed' message! Glad you have it going.
> >
> > Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
> > 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> > should change from receiveto transmit. Possibly a spurious output
> > from the crystal? I'm at a loss, perhaps someone else will have an idea??
> >
> > I don't know if your sideband reversal is related to the above
> > somehow, but it certainly is suspicious. My initial reaction would be
> > to leave the switch wiring alone, unless it shows evidence of being
> > 'adjusted' by a previous owner. I would say that is highly unlikely.
> >
> > There may be some connection with the fact that the LO is at 14.5
> > MHz..... I wonder if the transmit mixer has been mistuned to the LO
> > rather than 40M. So the receivemixer is tuned properly, but the
> > transmit mixer is not. Check the transmit mixer alignment relative to
> > 40M for starters and let us know what you find.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs

> > <www.k4oah.com>
> >
> > claudewelsch wrote:
> > > Hello Garey,
> > >
> > > I have two further problems with my TR-4, maybe you can help:
> > >
> > > 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
> > >
> > > 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
> > > With the Sideband switch on the left position i have:
> > > 80 m LOWER correct
> > > 40 m UPPER NOT correct
> > > 20 m LOWER NOT correct
> > > 15 m UPPER correct
> > > 10 m UPPER correct
> > > 10 m UPPER correct
> > > 10 m UPPER correct
> > >
> > > Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> > >
> > > 73s
> > > LX1EX
> > > Claude
> > >
> >
>
>

[Non-text portions of this message have been removed]

12937. Re: [DrakeRadio] Re: NIB R-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 19:28:45 UTC
From: Richard Knoppow
Topic: 12916 Message: 12937

----- Original Message -----
From: "Paul Christensen" <w9ac@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 02, 2013 7:11 AM
Subject: Re: [DrakeRadio] Re: NIB R-4C

> At some point someone has to open it, right? That would
> be an exciting moment for most any Drake collector.
>
> An R-4C sitting in an unopened box may actually need more
> TLC than a unit that receives periodic use. PTO race
> bearing grease will have dried and congealed in the last
> 40 years of complete non-use. Band switch wafers may need
> cleaning/lubrication with DeOxit. So, the excitement from
> the "out-of-the-box-experience" might be a bit dampened
> once the unit is pugged in and operating.
>
> Paul, W9AC

I am reminded of two short stories, the details of
neither can I remember. Similar plots: A convoluted murder
it done to obtain a hidden treasure. In one case, a supply
of rare wine, in the other the loot from a big bank job. In
the first the wine turns out to have turned to vinegar, in
the second the money is in "old", i.e., pre-1933 bills and
worthless. Someone may connect these to the stories. I
think the one about the money may have been used in a radio
script (giving away my age).
A test I always applied to presents is to shake the box
to see if it rattles. Non-rattling boxes generally
contained clothes and were not interesting at the time. Of
course later, clothes were quite interesting and
appreciated.

I used to have a fantasy of finding something like a
1928 Packard Twin Six roadster in a barn in nearly perfect
condition. No skeletons chained to the seats either.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12938. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 19:32:57 UTC
From: Richard Knoppow
Topic: 12900 Message: 12938

----- Original Message -----
From: "claudewelsch" <clwelsch@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 02, 2013 9:07 AM
Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4

> Ok, Garey. I'll check this in the evening. Ok, there is a
> crystal for 40 m, just none for 80 m and 20 m. The
> position of the switch in the schematics is a bit
> misleading, so I didn't see this at first.
> Is there a guide for the abbreviations somewhere (CO, PTO,
> LO) ?
>
> LX1EX
> Claude

Just in general, Drake schematics (and they are not
alone) look like a map of the Southern Pacific freight yard.
I get schematics like this printed large and trace wiring
with a colored pencil or highlighter. That keeps my eyes
from getting lost. Its sometimes helpful to re-draw parts
of a schematic in simplified form. Almost always schematics
of multiple pole switches are confusing to follow.
The schematics in Garrey's discs can be printed up to
map size.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12939. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:01:55 UTC
From: Garey Barrell
Topic: 12900 Message: 12939

Claude -

I screwed up that conversion scheme. The actual mix is BAND Osc (21.5 MHz) - PTO (5.5 MHz) = 16 MHz in Mixer V1, then LO (16 MHz) - CO (9 MHz) = 7 MHz in Mixer V4. I hope I haven't confused you more! :-)
Also thanks to those who explained my abbreviations.

I believe this also debunks my theory for the R / T frequency shift, which was weak at best. That one really has me stumped. ANYBODY HELP!?!?!

Someone else answered the 'wrong' sideband question. Because of the mixing scheme, some bands have the sideband inverted while others do not, depending upon the frequencies involved. The USB / LSB lights denote which sideband is being transmitted.

The lightsare necessary because Mixer V4 inverts the sideband on 80M but does not invert on all the other bands. So if you select the USB filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on 40, you have to change the filterto the LSB filter. If you select the LSB filter you have LSB on 40, 20, 15 and 10M so you have to change the filter to the USB for all but 40M. Lastly to get LSB on 80M you have to again select the USB filter which makes everything right from 20M and up. Very confusing.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
> Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
>
> LX1EX
> Claude
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Claude -
>>
>> OK. I guess I missed your 'fixed' message! Glad you have it going.
>>
>> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.

>> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
>> should change from receiveto transmit. Possibly a spurious output
>> from the crystal? I'm at a loss, perhaps someone else will have an idea??
>>
>> I don't know if your sideband reversal is related to the above
>> somehow, but it certainly is suspicious. My initial reaction would be
>> to leave the switch wiring alone, unless it shows evidence of being
>> 'adjusted' by a previous owner. I would say that is highly unlikely.
>>
>> There may be some connection with the fact that the LO is at 14.5
>> MHz..... I wonder if the transmit mixer has been mistuned to the LO
>> rather than 40M. So the receivemixer is tuned properly, but the
>> transmit mixer is not. Check the transmit mixer alignment relative to
>> 40M for starters and let us know what you find.
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>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> claudewelsch wrote:
>>> Hello Garey,
>>>
>>> I have two further problems with my TR-4, maybe you can help:
>>>
>>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
>>>
>>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
>>> With the Sideband switch on the left position i have:
>>> 80 m LOWER correct
>>> 40 m UPPER NOT correct
>>> 20 m LOWER NOT correct
>>> 15 m UPPER correct
>>> 10 m UPPER correct
>>> 10 m UPPER correct
>>> 10 m UPPER correct
>>>
>>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
>>>
>>> 73s
>>> LX1EX
>>> Claude
>>>
>
>

>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

12940. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:04:03 UTC
From: claudewelsch
Topic: 12900 Message: 12940

You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!

Claude

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "claudewelsch" <clwelsch@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, April 02, 2013 9:07 AM
> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
>
>
> > Ok, Garey. I'll check this in the evening. Ok, there is a
> > crystal for 40 m, just none for 80 m and 20 m. The
> > position of the switch in the schematics is a bit
> > misleading, so I didn't see this at first.
> > Is there a guide for the abbreviations somewhere (CO, PTO,
> > LO) ?
> >
> > LX1EX
> > Claude
>
> Just in general, Drake schematics (and they are not
> alone) look like a map of the Southern Pacific freight yard.
> I get schematics like this printed large and trace wiring
> with a colored pencil or highlighter. That keeps my eyes
> from getting lost. Its sometimes helpful to re-draw parts
> of a schematic in simplified form. Almost always schematics
> of multiple pole switches are confusing to follow.
> The schematics in Garrey's discs can be printed up to
> map size.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

12941. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:05:59 UTC
From: Garey Barrell
Topic: 12900 Message: 12941

Mark -

Thanks for clearing that up. I didn't do a very good job of explaining the SIDEBAND switching. The reason it works that way is because the sideband is inverted in the Mixer (V4) which inverts the sideband coming from the BMon 80M ONLY. So if you select the USB filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on 40, you have to change the filter to the LSB filter. If you select the LSB filter you have LSB on 40, 20, 15 and 10M so you have to change the filter to the USB for all but 40M. Lastly to get LSB on 80M you have to again select the USB filter which makes everything right from 20M and up.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> Hi Claude.
>
> > 2) The Sideband is not correct on all bands. I can of course switch
> > with the Sideband switch, but should it not be automatically right.
> > With the Sideband switch on the left position i have:
> > 80 m LOWER correct
> > 40 m UPPER NOT correct
> > 20 m LOWER NOT correct
> > 15 m UPPER correct
> > 10 m UPPER correct
> > 10 m UPPER correct
> > 10 m UPPER correct
>
> This is the same as my TR-4, and I believe my TR-3 as well; although I
> haven't used my TR-3 for a while and I'm rebuilding the AC-3 at the
> moment.
>
> As far as I know (and understand) the Sideband switch doesn't really
> have defined settings. In other words, left is not LSB and right is
> not USB. The sideband used is indicated by the Upper and Lower panel
> lights, and the selection is by the Sideband switch.
>
> The TR-4 manual indicates this as well (on page 21; Operation) where
> it says the Sideband control should be "On the desired sideband as
> shown by the indicator lights."

>
> So I would say your switching is correct, but I have no idea why this
> was done instead of having one Sideband switch setting be LSB and the
> other be USB.
>
> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
>
> I seem to recall having first seen definitions for these in "older"
> amateur radio handbooks (pick your favorite :-) I started using them
> from the late 1950s. (I learned a lot from my father's 1959 ARRL
> handbook.) I believe you will find:
>
> CO = Carrier Oscillator
> PTO = Permeability Tuned Oscillator
> LO = Local Oscillator
>
> 73
>
> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

12942. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:12:56 UTC
From: Garey Barrell
Topic: 12900 Message: 12942

Claude -

You're probably right. What is the s/n of your TR-4??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!
>
> Claude
>
> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>>
>> ----- Original Message -----
>> From: "claudewelsch" <clwelsch@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Tuesday, April 02, 2013 9:07 AM
>> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
>>
>>
>>> Ok, Garey. I'll check this in the evening. Ok, there is a
>>> crystal for 40 m, just none for 80 m and 20 m. The
>>> position of the switch in the schematics is a bit
>>> misleading, so I didn't see this at first.
>>> Is there a guide for the abbreviations somewhere (CO, PTO,
>>> LO) ?
>>>
>>> LX1EX
>>> Claude
>> Just in general, Drake schematics (and they are not
>> alone) look like a map of the Southern Pacific freight yard.
>> I get schematics like this printed large and trace wiring
>> with a colored pencil or highlighter. That keeps my eyes
>> from getting lost. Its sometimes helpful to re-draw parts
>> of a schematic in simplified form. Almost always schematics
>> of multiple pole switches are confusing to follow.
>> The schematics in Garrey's discs can be printed up to
>> map size.
>>
>>

>>

12943. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:13:35 UTC
From: claudewelsch
Topic: 12900 Message: 12943

Hi Garey,

The error was on my side! I don't know why I was convinced that the receive frequency was right and the TX 30 kHz off (probably because nobody ever answered me when I called on 40m...) but the RX frequency is off too! I just used my other transceiver to send and I found the truth!
I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.

Sorry for the mistake.

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> I screwed up that conversion scheme. The actual mix is BAND Osc (21.5
> MHz) - PTO (5.5 MHz) = 16 MHz in Mixer V1, then LO (16 MHz) - CO (9
> MHz) = 7 MHz in Mixer V4. I hope I haven't confused you more! :-)
> Also thanks to those who explained my abbreviations.
>
> I believe this also debunks my theory for the R / T frequency shift,
> which was weak at best. That one really has me stumped. ANYBODY
> HELP!?!?!
>
> Someone else answered the 'wrong' sideband question. Because of the
> mixing scheme, some bands have the sideband inverted while others do
> not, depending upon the frequencies involved. The USB / LSB lights
> denote which sideband is being transmitted.
>
> The lightsare necessary because Mixer V4 inverts the sideband on 80M
> but does not invert on all the other bands. So if you select the USB
> filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
> 40, you have to change the filterto the LSB filter. If you select the
> LSB filter you have LSB on 40, 20, 15 and 10M so you have to change
> the filter to the USB for all but 40M. Lastly to get LSB on 80M you
> have to again select the USB filter which makes everything right from
> 20M and up. Very confusing.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> >
> > LX1EX
> > Claude
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Claude -
> >>
> >> OK. I guess I missed your 'fixed' message! Glad you have it going.
> >>
> >> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
> >> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> >> should change from receiveto transmit. Possibly a spurious output
> >> from the crystal? I'm at a loss, perhaps someone else will have an idea??
> >>
> >> I don't know if your sideband reversal is related to the above
> >> somehow, but it certainly is suspicious. My initial reaction would be
> >> to leave the switch wiring alone, unless it shows evidence of being
> >> 'adjusted' by a previous owner. I would say that is highly unlikely.
> >>
> >> There may be some connection with the fact that the LO is at 14.5
> >> MHz..... I wonder if the transmit mixer has been mistuned to the LO
> >> rather than 40M. So the receivemixer is tuned properly, but the
> >> transmit mixer is not. Check the transmit mixer alignment relative to
> >> 40M for starters and let us know what you find.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> claudewelsch wrote:
> >>> Hello Garey,
> >>>
> >>> I have two further problems with my TR-4, maybe you can help:
> >>>
> >>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
> >>>
> >>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband

switch, but should it not be automatically right.
> >>> With the Sideband switch on the left position i have:
> >>> 80 m LOWER correct
> >>> 40 m UPPER NOT correct
> >>> 20 m LOWER NOT correct
> >>> 15 m UPPER correct
> >>> 10 m UPPER correct
> >>> 10 m UPPER correct
> >>> 10 m UPPER correct
> >>>
> >>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> >>>
> >>> 73s
> >>> LX1EX
> >>> Claude
> >>>
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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12944. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:16:18 UTC
From: Mark Pilant
Topic: 12900 Message: 12944

Hi Garey.

> The reason it works that way is

I think the correct technical term for this is "magic".
:-) :-) :-) with a few :-P :-P

73

- Mark N1VQW

12945. Clean looking 4B station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:16:59 UTC
From: VE3UK Bob
Topic: 12945 Message: 12945

Nice looking 4B station ending tonight on OverPay... Any bets where it will finish?

http://www.ebay.com/itm/111039799996?ssPageName=STRK:MEWAX:IT&_trksid=p3984.m1438.l2649

12946. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:23:45 UTC
From: claudewelsch
Topic: 12900 Message: 12946

My S/N is 27125.

I was looking at that switch for USB/LSB but it doesn't correspond at all to the schematics!

By the way Mark N1VQW said, his TR4 was the same as mine. Is it always so?

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> You're probably right. What is the s/n of your TR-4??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!
> >
> > Claude
> >
> > --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@> wrote:
> >>
> >> ----- Original Message -----
> >> From: "claudewelsch" <clwelsch@>
> >> To: <DrakeRadio@yahoogroups.com>
> >> Sent: Tuesday, April 02, 2013 9:07 AM
> >> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
> >>
> >>
> >>> Ok, Garey. I'll check this in the evening. Ok, there is a
> >>> crystal for 40 m, just none for 80 m and 20 m. The
> >>> position of the switch in the schematics is a bit
> >>> misleading, so I didn't see this at first.
> >>> Is there a guide for the abbreviations somewhere (CO, PTO,
> >>> LO) ?
> >>>
> >>> LX1EX

> >>> Claude
> >> Just in general, Drake schematics (and they are not
> >> alone) look like a map of the Southern Pacific freight yard.
> >> I get schematics like this printed large and trace wiring
> >> with a colored pencil or highlighter. That keeps my eyes
> >> from getting lost. Its sometimes helpful to re-draw parts
> >> of a schematic in simplified form. Almost always schematics
> >> of multiple pole switches are confusing to follow.
> >> The schematics in Garrey's discs can be printed up to
> >> map size.
> >>
> >>
> >>
>

12947. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:46:51 UTC
From: Garey Barrell
Topic: 12900 Message: 12947

The correct schematic would have the number 966727000 at the bottom
just below the title. What is the number on the schematic you have?
There are eight different versions of the TR-4. Yours is version 4.

I believewhat Mark said is true. I haven't used my TR-4C for a year
or so, and only CW so always use the '-X' position!!!

The best sourcefor crystals is International Crystal Mfrs
<www.icmfg.com>. Should be only about $25 plus whatever additional
postage to you. They have all the Drake information and only know
which crystal (frequency) for which radio to getyou the correct one.
AND it WILL be on frequency!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> My S/N is 27125.
>
> I was looking at that switch for USB/LSB but it doesn't correspond at all to the
schematics!
>
> By the way Mark N1VQW said, his TR4 was the same as mine. Is it always so?
>
> Claude
> LX1EX
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Claude -
>>
>> You're probably right. What is the s/n of your TR-4??
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> claudewelsch wrote:

>>> You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!
>>>
>>> Claude
>>>
>>> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@> wrote:
>>>> ----- Original Message -----
>>>> From: "claudewelsch" <clwelsch@>
>>>> To: <DrakeRadio@yahoogroups.com>
>>>> Sent: Tuesday, April 02, 2013 9:07 AM
>>>> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
>>>>
>>>>
>>>>> Ok, Garey. I'll check this in the evening. Ok, there is a
>>>>> crystal for 40 m, just none for 80 m and 20 m. The
>>>>> position of the switch in the schematics is a bit
>>>>> misleading, so I didn't see this at first.
>>>>> Is there a guide for the abbreviations somewhere (CO, PTO,
>>>>> LO) ?
>>>>>
>>>>> LX1EX
>>>>> Claude
>>>> Just in general, Drake schematics (and they are not
>>>> alone) look like a map of the Southern Pacific freight yard.
>>>> I get schematics like this printed large and trace wiring
>>>> with a colored pencil or highlighter. That keeps my eyes
>>>> from getting lost. Its sometimes helpful to re-draw parts
>>>> of a schematic in simplified form. Almost always schematics
>>>> of multiple pole switches are confusing to follow.
>>>> The schematics in Garrey's discs can be printed up to
>>>> map size.
>>>>
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> Yahoo! Groups Links
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12948. R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:56:18 UTC
From: Don Cunningham
Topic: 12948 Message: 12948

Since we have had a thread on "near mint" rigs lately, I got to thinking that I should offer a set I bought the other day before I get into them very much. I have a nice, complete early set of Drakes from 1965, by the QC tags on the receiver and transmitter. It came from the estate of Jim Brooks, W5PYH, an IBM employee in the Oklahoma City area. It has NOT been fired up since coming from Jim's station, and the friend of mine that bought it last year didn't want the set, he was just helping the widow "get rid of" all the stuff.

I am curious if anyone is interested in the set, consisting of:

R-4 s/n 0678, QC tag dated 3/1/65 Excellent condition with the exception of the top cover. Apparently, in a move, it took a real shock on the top, damaging it slightly in 3 or 4 places. Hard to see in pictures, but it is there. VERY minimal corrosion on the top of the chassis, one of the best I have ever seen. Again, shiny and hard to see in photos, but there.

T-4X s/n 10441, QC tag dated 26/10/5 which coorelates to October 26, 1965. Excellent condition also, with VERY minimal pitting on the chassis top. Again hard to see in photos as it is so nice and shiny.

AC-3 s/n 18731 and MS-3 (no tag on front grille and not as deep as the MS-4) both in VERY nice, original shape.

Downsides: the cover on the R-4. Looks so nice that my friend hadn't even noticed the damage. The SK was a technician (or engineer, I really didn't know him) and worked on his own gear. The can capacitors in both the R-4 and T-4X have been bridged under the chassis with modern caps. NO other mods/repair noted during my inspection. The T-4X manual is a reprint, and the R-4 manual although original has an earlier s/n on the cover, so didn't come with this rig. Schematic is of the right vintage in the case of the R-4, not sure of the reprint.

For pricing, I would consider about what WB4HFN shows on his resale charts as "average", $425 picked up in Southwestern Oklahoma. If you insist on shipping it, it would have to ship in 4 boxes, and I could take it to a private shipper I have used as he packs well. All packing/shipping is your responsibility. I would get pricing first, as it will not be cheap, but it will arrive well packed and not damaged any further.

If no interest on the list at that price, I'll advertise elsewhere or refurb it and build another shelf, HI. I am being honest as I can, and have a NUMBER of pictures I would share with a serious buyer. This is one of the nicest sets I have seen in many years of fooling with these old Drakes, so if you want a nice example of this vintage rig, let me know. I found in some other stuff I bought from that estate an 8" x 10" color shot of this station in Jim's shack years ago.

BTW, I did share the s/n data with WB4HFN.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3267 / Virus Database: 3161/6220 - Release Date: 04/02/13

12949. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 20:57:28 UTC
From: w1kilofoxtrot
Topic: 12900 Message: 12949

Just for my own sake of clarity, let me comment:

A PTO -is- a VFO, since it is an oscillator whose output frequency can be varied.

A VFO may be a PTO, or a capacitor tuned, or varactor tuned, or even DDS (direct digital synthesis) oscillator.

Generally speaking, VFO is the most generic term, and applies to all of the different ways we tune an oscillator, with the exception of a crystal oscillator that can be 'pulled' in frequency, and thus varied, but not by much.

Does that make any sense?

73,
Steve
W1KF

--- In DrakeRadio@yahoogroups.com, vacuuminded2@... wrote:
>
> CO= carrier oscillator
> LO= local oscillator
> PTO= your "VFO", which is technically not. PTO= Permeability Tune Oscillator. You are moving a slug thus changing inductance, not a capacitor like in a VFO.
>
> Chris
>
>
> Sent from my outdated iPhone wireless thingy
>
> On Apr 2, 2013, at 11:07 AM, "claudewelsch" <clwelsch@...> wrote:
>
> > Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> >
> > LX1EX
> > Claude
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >
> > > Claude -
> > >
> > > OK. I guess I missed your 'fixed' message! Glad you have it going.
> > >
> > > Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.

> > > 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> > > should change from receiveto transmit. Possibly a spurious output
> > > from the crystal? I'm at a loss, perhaps someone else will have an idea??
> > >
> > > I don't know if your sideband reversal is related to the above
> > > somehow, but it certainly is suspicious. My initial reaction would be
> > > to leave the switch wiring alone, unless it shows evidence of being
> > > 'adjusted' by a previous owner. I would say that is highly unlikely.
> > >
> > > There may be some connection with the fact that the LO is at 14.5
> > > MHz..... I wonder if the transmit mixer has been mistuned to the LO
> > > rather than 40M. So the receivemixer is tuned properly, but the
> > > transmit mixer is not. Check the transmit mixer alignment relative to
> > > 40M for starters and let us know what you find.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > claudewelsch wrote:
> > > > Hello Garey,
> > > >
> > > > I have two further problems with my TR-4, maybe you can help:
> > > >
> > > > 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
> > > >
> > > > 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
> > > > With the Sideband switch on the left position i have:
> > > > 80 m LOWER correct
> > > > 40 m UPPER NOT correct
> > > > 20 m LOWER NOT correct
> > > > 15 m UPPER correct
> > > > 10 m UPPER correct
> > > > 10 m UPPER correct
> > > > 10 m UPPER correct
> > > >
> > > > Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> > > >
> > > > 73s
> > > > LX1EX
> > > > Claude
> > > >
> > >

> >
> >
>
>
> [Non-text portions of this message have been removed]
>

12950. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 21:00:01 UTC
From: claudewelsch
Topic: 12900 Message: 12950

I want to have:

USB on 10m, 15m and 20m, LSB on 40m and 80m.

This should be possible to do it automatically with the help of the bandswitch.

There is a position of the Bandswitch to do this, but it is done incorrectly on 20m and 40m. Is there a historical reason for this ?

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mark -
>
> Thanks for clearing that up. I didn't do a very good job of
> explaining the SIDEBAND switching. The reason it works that way is
> because the sideband is inverted in the Mixer (V4) which inverts the
> sideband coming from the BMon 80M ONLY. So if you select the USB
> filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
> 40, you have to change the filter to the LSB filter. If you select
> the LSB filter you have LSB on 40, 20, 15 and 10M so you have to
> change the filter to the USB for all but 40M. Lastly to get LSB on 80M
> you have to again select the USB filter which makes everything right
> from 20M and up.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Mark Pilant wrote:
> > Hi Claude.
> >
> > > 2) The Sideband is not correct on all bands. I can of course switch
> > > with the Sideband switch, but should it not be automatically right.
> > > With the Sideband switch on the left position i have:
> > > 80 m LOWER correct
> > > 40 m UPPER NOT correct
> > > 20 m LOWER NOT correct
> > > 15 m UPPER correct
> > > 10 m UPPER correct
> > > 10 m UPPER correct

> > > 10 m UPPER correct
> >
> > This is the same as my TR-4, and I believe my TR-3 as well; although I
> > haven't used my TR-3 for a while and I'm rebuilding the AC-3 at the
> > moment.
> >
> > As far as I know (and understand) the Sideband switch doesn't really
> > have defined settings. In other words, left is not LSB and right is
> > not USB. The sideband used is indicated by the Upper and Lower panel
> > lights, and the selection is by the Sideband switch.
> >
> > The TR-4 manual indicates this as well (on page 21; Operation) where
> > it says the Sideband control should be "On the desired sideband as
> > shown by the indicator lights."
> >
> > So I would say your switching is correct, but I have no idea why this
> > was done instead of having one Sideband switch setting be LSB and the
> > other be USB.
> >
> > > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> >
> > I seem to recall having first seen definitions for these in "older"
> > amateur radio handbooks (pick your favorite :-) I started using them
> > from the late 1950s. (I learned a lot from my father's 1959 ARRL
> > handbook.) I believe you will find:
> >
> > CO = Carrier Oscillator
> > PTO = Permeability Tuned Oscillator
> > LO = Local Oscillator
> >
> > 73
> >
> > - Mark N1VQW
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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>

12951. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 21:10:15 UTC
From: claudewelsch
Topic: 12900 Message: 12951

Dear Garey,

I have on original manual although a bit in pieces but I don't see any numbers below the title SCHEMATIC DIAGRAM - MODEL TR-4 TRANSCEIVER.

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> The correct schematic would have the number 966727000 at the bottom
> just below the title. What is the number on the schematic you have?
> There are eight different versions of the TR-4. Yours is version 4.
>
> I believewhat Mark said is true. I haven't used my TR-4C for a year
> or so, and only CW so always use the '-X' position!!!
>
> The best sourcefor crystals is International Crystal Mfrs
> <www.icmfg.com>. Should be only about $25 plus whatever additional
> postage to you. They have all the Drake information and only know
> which crystal (frequency) for which radio to getyou the correct one.
> AND it WILL be on frequency!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > My S/N is 27125.
> >
> > I was looking at that switch for USB/LSB but it doesn't correspond at all to the schematics!
> >
> > By the way Mark N1VQW said, his TR4 was the same as mine. Is it always so?
> >
> > Claude
> > LX1EX
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Claude -
> >>

> >> You're probably right. What is the s/n of your TR-4??
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> claudewelsch wrote:
> >>> You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!
> >>>
> >>> Claude
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@> wrote:
> >>>> ----- Original Message -----
> >>>> From: "claudewelsch" <clwelsch@>
> >>>> To: <DrakeRadio@yahoogroups.com>
> >>>> Sent: Tuesday, April 02, 2013 9:07 AM
> >>>> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
> >>>>
> >>>>
> >>>> Ok, Garey. I'll check this in the evening. Ok, there is a
> >>>> crystal for 40 m, just none for 80 m and 20 m. The
> >>>> position of the switch in the schematics is a bit
> >>>> misleading, so I didn't see this at first.
> >>>> Is there a guide for the abbreviations somewhere (CO, PTO,
> >>>> LO) ?
> >>>>
> >>>> LX1EX
> >>>> Claude
> >>>> Just in general, Drake schematics (and they are not
> >>>> alone) look like a map of the Southern Pacific freight yard.
> >>>> I get schematics like this printed large and trace wiring
> >>>> with a colored pencil or highlighter. That keeps my eyes
> >>>> from getting lost. Its sometimes helpful to re-draw parts
> >>>> of a schematic in simplified form. Almost always schematics
> >>>> of multiple pole switches are confusing to follow.
> >>>> The schematics in Garrey's discs can be printed up to
> >>>> map size.
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> > >
> > > Yahoo! Groups Links

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12952. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 21:23:48 UTC
From: Garey Barrell
Topic: 12900 Message: 12952

Steve -

I supposethat's correct... :-) Once upon a time, ALL 'VFOs' WERE VFOs, an LC circuit with a variable capacitor. Their frequency was NOT linear over it's range because of the 'One over two Pi fc' resonant frequency. Then came the PermeabilityTunedOsc ('PTO') or Linear Master Osc) ('LMO') which was an LC circuit with a variable inductor, which could be wound to be MUCH more linear over the range. Various techniques were applied to make linearity even better and eventually we got almost perfect linearity from one end to the other. Then we hadPhase Locked Loop (PLL) circuits which essentially gave 'perfect' linearity, but required considerable circuitry and inherently had noise along with the output signal. The varactor Varactor Tuned Osc (VTO) also allowed some 'VFOs' to be built and linearized by shaping the DC voltage applied. And now we have had several generations of Direct Digital Synthesis (DDS) oscillators which literally 'build' the RF signal one bit at a time.There are probably more, but that's all I can recall. I'm sure there are others under development that we haven't seen yet!

All of the Drake 4 Line and 7 Line radios use PTOs.

So yeah, they're ALL VFO's (Variable Frequency Oscillator) but the improved operation of the later 'versions' deserve a little recognition! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w1kilofoxtrot wrote:
> Just for my own sake of clarity, let me comment:
>
> A PTO -is- a VFO, since it is an oscillator whose output frequency can be varied.
>
> A VFO may be a PTO, or a capacitor tuned, or varactor tuned, or even DDS (direct digital synthesis) oscillator.
>
> Generally speaking, VFO is the most generic term, and applies to all of the different ways we tune an oscillator, with the exception of a crystal oscillator that can be 'pulled' in frequency, and thus varied, but not by much.
>
> Does that make any sense?

>
> 73,
> Steve
> W1KF
>
> --- In DrakeRadio@yahoogroups.com, vacuuminded2@... wrote:
>> CO= carrier oscillator
>> LO= local oscillator
>> PTO= your "VFO", which is technically not. PTO= Permeability Tune Oscillator. You are moving a slug thus changing inductance, not a capacitor like in a VFO.
>>
>> Chris
>>
>>
>> Sent from my outdated iPhone wireless thingy
>>
>> On Apr 2, 2013, at 11:07 AM, "claudewelsch" <clwelsch@...> wrote:
>>
>>> Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
>>> Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
>>>
>>> LX1EX
>>> Claude
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Claude -
>>>>
>>>> OK. I guess I missed your 'fixed' message! Glad you have it going.
>>>>
>>>> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
>>>> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
>>>> should change from receiveto transmit. Possibly a spurious output
>>>> from the crystal? I'm at a loss, perhaps someone else will have an idea??
>>>>
>>>> I don't know if your sideband reversal is related to the above
>>>> somehow, but it certainly is suspicious. My initial reaction would be
>>>> to leave the switch wiring alone, unless it shows evidence of being
>>>> 'adjusted' by a previous owner. I would say that is highly unlikely.
>>>>
>>>> There may be some connection with the fact that the LO is at 14.5
>>>> MHz..... I wonder if the transmit mixer has been mistuned to the LO
>>>> rather than 40M. So the receivemixer is tuned properly, but the
>>>> transmit mixer is not. Check the transmit mixer alignment relative to
>>>> 40M for starters and let us know what you find.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>

>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> claudewelsch wrote:
>>>>> Hello Garey,
>>>>>
>>>>> I have two further problems with my TR-4, maybe you can help:
>>>>>
>>>>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
>>>>>
>>>>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
>>>>> With the Sideband switch on the left position i have:
>>>>> 80 m LOWER correct
>>>>> 40 m UPPER NOT correct
>>>>> 20 m LOWER NOT correct
>>>>> 15 m UPPER correct
>>>>> 10 m UPPER correct
>>>>> 10 m UPPER correct
>>>>> 10 m UPPER correct
>>>>>
>>>>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
>>>>>
>>>>> 73s
>>>>> LX1EX
>>>>> Claude
>>>>>
>>>
>>
>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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12953. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 21:32:09 UTC
From: Garey Barrell
Topic: 12900 Message: 12953

Claude -

Itis NOT possible for the TR-4 because of the mixing scheme. The SSB
is generated at 9 MHz. Either Upper or Lower sideband is selectedat
this frequency. The resultant signal is mixed in (V4) which inverts
the sideband on all but 80M. LSB in, USB out. Or, USB in, LSB out.
There is no 'historical' reason, it's just a fact of the design used.
'Modern'radios get around this by switching things around with tiny
relays that weren't available in 1963.

So you have to use the USB filter on 80M in order to get LSB out.
Inverted.

You have to use the LSB filter on 40M in order to get LSB out. No
inversion.

You have to use the USB filter on 20, 15 and 10M to get USB out. No
inversion.

So the USB filter could be used on all BUT 40M.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> I want to have:
>
> USB on 10m, 15m and 20m, LSB on 40m and 80m.
>
> This should be possible to do it automatically with the help of the bandswitch.
>
> There is a position of the Bandswitch to do this, but it is done incorrectly on 20m and
40m. Is there a historical reason for this ?
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Mark -
>>
>> Thanks for clearing that up. I didn't do a very good job of
>> explaining the SIDEBAND switching. The reason it works that way is
>> because the sideband is inverted in the Mixer (V4) which inverts the

>> sideband coming from the BMon 80M ONLY. So if you select the USB
>> filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
>> 40, you have to change the filter to the LSB filter. If you select
>> the LSB filter you have LSB on 40, 20, 15 and 10M so you have to
>> change the filter to the USB for all but 40M. Lastly to get LSB on 80M
>> you have to again select the USB filter which makes everything right
>> from 20M and up.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Mark Pilant wrote:
>>> Hi Claude.
>>>
>>> > 2) The Sideband is not correct on all bands. I can of course switch
>>> > with the Sideband switch, but should it not be automatically right.
>>> > With the Sideband switch on the left position i have:
>>> > 80 m LOWER correct
>>> > 40 m UPPER NOT correct
>>> > 20 m LOWER NOT correct
>>> > 15 m UPPER correct
>>> > 10 m UPPER correct
>>> > 10 m UPPER correct
>>> > 10 m UPPER correct
>>>
>>> This is the same as my TR-4, and I believe my TR-3 as well; although I
>>> haven't used my TR-3 for a while and I'm rebuilding the AC-3 at the
>>> moment.
>>>
>>> As far as I know (and understand) the Sideband switch doesn't really
>>> have defined settings. In other words, left is not LSB and right is
>>> not USB. The sideband used is indicated by the Upper and Lower panel
>>> lights, and the selection is by the Sideband switch.
>>>
>>> The TR-4 manual indicates this as well (on page 21; Operation) where
>>> it says the Sideband control should be "On the desired sideband as
>>> shown by the indicator lights."
>>>
>>> So I would say your switching is correct, but I have no idea why this
>>> was done instead of having one Sideband switch setting be LSB and the
>>> other be USB.
>>>
>>> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
>>>
>>> I seem to recall having first seen definitions for these in "older"
>>> amateur radio handbooks (pick your favorite :-) I started using them

>>> from the late 1950s. (I learned a lot from my father's 1959 ARRL
>>> handbook.) I believe you will find:
>>>
>>> CO = Carrier Oscillator
>>> PTO = Permeability Tuned Oscillator
>>> LO = Local Oscillator
>>>
>>> 73
>>>
>>> - Mark N1VQW
>>>
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>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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12954. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 21:34:21 UTC
From: Garey Barrell
Topic: 12900 Message: 12954

Claude -

That could even be a preliminary schematic. All schematic versions
are on my CD.

See attached.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Dear Garey,
>
> I have on original manual although a bit in pieces but I don't see any numbers below the title SCHEMATIC DIAGRAM - MODEL TR-4 TRANSCEIVER.
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> The correct schematic would have the number 966727000 at the bottom
>> just below the title. What is the number on the schematic you have?
>> There are eight different versions of the TR-4. Yours is version 4.
>>
>> I believewhat Mark said is true. I haven't used my TR-4C for a year
>> or so, and only CW so always use the '-X' position!!!
>>
>> The best sourcefor crystals is International Crystal Mfrs
>> <www.icmfg.com>. Should be only about $25 plus whatever additional
>> postage to you. They have all the Drake information and only know
>> which crystal (frequency) for which radio to getyou the correct one.
>> AND it WILL be on frequency!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> claudewelsch wrote:
>>> My S/N is 27125.

>>>
>>> I was looking at that switch for USB/LSB but it doesn't correspond at all to the schematics!
>>>
>>> By the way Mark N1VQW said, his TR4 was the same as mine. Is it always so?
>>>
>>> Claude
>>> LX1EX
>>>
>>>
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Claude -
>>>>
>>>> You're probably right. What is the s/n of your TR-4??
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
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>>>>
>>>> claudewelsch wrote:
>>>>> You are right, Richard. And the schematics don't correspond at all to what I find in the chassis!
>>>>>
>>>>> Claude
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@> wrote:
>>>>>> ----- Original Message -----
>>>>>> From: "claudewelsch" <clwelsch@>
>>>>>> To: <DrakeRadio@yahoogroups.com>
>>>>>> Sent: Tuesday, April 02, 2013 9:07 AM
>>>>>> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
>>>>>>
>>>>>>
>>>>>>> Ok, Garey. I'll check this in the evening. Ok, there is a
>>>>>>> crystal for 40 m, just none for 80 m and 20 m. The
>>>>>>> position of the switch in the schematics is a bit
>>>>>>> misleading, so I didn't see this at first.
>>>>>>> Is there a guide for the abbreviations somewhere (CO, PTO,
>>>>>>> LO) ?
>>>>>>>
>>>>>>> LX1EX
>>>>>>> Claude
>>>>>> Just in general, Drake schematics (and they are not
>>>>>> alone) look like a map of the Southern Pacific freight yard.
>>>>>> I get schematics like this printed large and trace wiring
>>>>>> with a colored pencil or highlighter. That keeps my eyes

>>>>>> from getting lost. Its sometimes helpful to re-draw parts
>>>>>> of a schematic in simplified form. Almost always schematics
>>>>>> of multiple pole switches are confusing to follow.
>>>>>> The schematics in Garrey's discs can be printed up to
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> Yahoo! Groups Links
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12955. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-02 22:39:00 UTC
From: Bob Macklin
Topic: 12900 Message: 12955

In 1966 I went to Collins in Cedar Rapids on a military contract.

Because I was a ham I was introduced to the tech that tuned the PTOs.

He was blind. He used a disk with holes in it on the shaft and for each position he would tweak the coil. At that time every PTO produced there was adjusted the same way by the same person.

He had JOB SECURTIY! At least until PLLs took over.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, April 02, 2013 2:23 PM
Subject: Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Steve -

I supposethat's correct... :-) Once upon a time, ALL 'VFOs' WERE VFOs, an LC circuit with a variable capacitor. Their frequency was NOT linear over it's range because of the 'One over two Pi fc' resonant frequency. Then came the PermeabilityTunedOsc ('PTO') or Linear Master Osc) ('LMO') which was an LC circuit with a variable inductor, which could be wound to be MUCH more linear over the range. Various techniques were applied to make linearity even better and eventually we got almost perfect linearity from one end to the other. Then we hadPhase Locked Loop (PLL) circuits which essentially gave 'perfect' linearity, but required considerable circuitry and inherently had noise along with the output signal. The varactor Varactor Tuned Osc (VTO) also allowed some 'VFOs' to be built and linearized by shaping the DC voltage applied. And now we have had several generations of Direct Digital Synthesis (DDS) oscillators which literally 'build' the RF signal one bit at a time.There are probably more, but that's all I can recall. I'm sure there are others under development that we haven't seen yet!

All of the Drake 4 Line and 7 Line radios use PTOs.

So yeah, they're ALL VFO's (Variable Frequency Oscillator) but the improved operation of the later 'versions' deserve a little recognition! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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w1kilofoxtrot wrote:
> Just for my own sake of clarity, let me comment:
>
> A PTO -is- a VFO, since it is an oscillator whose output frequency can be varied.
>
> A VFO may be a PTO, or a capacitor tuned, or varactor tuned, or even DDS (direct digital synthesis) oscillator.
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> Generally speaking, VFO is the most generic term, and applies to all of the different ways we tune an oscillator, with the exception of a crystal oscillator that can be 'pulled' in frequency, and thus varied, but not by much.
>
> Does that make any sense?
>
> 73,
> Steve
> W1KF
>
> --- In DrakeRadio@yahoogroups.com, vacuuminded2@... wrote:
>> CO= carrier oscillator
>> LO= local oscillator
>> PTO= your "VFO", which is technically not. PTO= Permeability Tune Oscillator. You are moving a slug thus changing inductance, not a capacitor like in a VFO.
>>
>> Chris
>>
>>
>> Sent from my outdated iPhone wireless thingy
>>
>> On Apr 2, 2013, at 11:07 AM, "claudewelsch" <clwelsch@...> wrote:
>>
>>> Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
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>>>
>>> LX1EX
>>> Claude
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Claude -
>>>>
>>>> OK. I guess I missed your 'fixed' message! Glad you have it going.
>>>>
>>>> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.

>>>> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
>>>> should change from receiveto transmit. Possibly a spurious output
>>>> from the crystal? I'm at a loss, perhaps someone else will have an idea??
>>>>
>>>> I don't know if your sideband reversal is related to the above
>>>> somehow, but it certainly is suspicious. My initial reaction would be
>>>> to leave the switch wiring alone, unless it shows evidence of being
>>>> 'adjusted' by a previous owner. I would say that is highly unlikely.
>>>>
>>>> There may be some connection with the fact that the LO is at 14.5
>>>> MHz..... I wonder if the transmit mixer has been mistuned to the LO
>>>> rather than 40M. So the receivemixer is tuned properly, but the
>>>> transmit mixer is not. Check the transmit mixer alignment relative to
>>>> 40M for starters and let us know what you find.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> claudewelsch wrote:
>>>>> Hello Garey,
>>>>>
>>>>> I have two further problems with my TR-4, maybe you can help:
>>>>>
>>>>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency.
When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the
schematics and there is no crystal for the 40m band!
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>>>>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband
switch, but should it not be automatically right.
>>>>> With the Sideband switch on the left position i have:
>>>>> 80 m LOWER correct
>>>>> 40 m UPPER NOT correct
>>>>> 20 m LOWER NOT correct
>>>>> 15 m UPPER correct
>>>>> 10 m UPPER correct
>>>>> 10 m UPPER correct
>>>>> 10 m UPPER correct
>>>>>
>>>>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
>>>>>
>>>>> 73s
>>>>> LX1EX
>>>>> Claude
>>>>>
>>>
>>

>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12956. Re: [DrakeRadio] Clean looking 4B station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 00:58:04 UTC
From: Steve Wedge
Topic: 12945 Message: 12956

Went for over a grand. It does look to be in 90th+ percentile, maybe 95th.

With anything that acquires collectors, whether it be radios, cars, coins or baseball cards, condition is everything even when rarity isn't an issue.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: VE3UK Bob
Sent: Tuesday, April 02, 2013 4:16 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Clean looking 4B station

Nice looking 4B station ending tonight on OverPay... Any bets where it will finish?

http://www.ebay.com/itm/111039799996?ssPageName=STRK:MEWAX:IT&_trksid=p3984.m1438.l2649

[Non-text portions of this message have been removed]

12957. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 01:01:53 UTC
From: Steve Wedge
Topic: 12948 Message: 12957

They must have built a lot of R-4's in March of '65. Mine's s/n 936 and its tag is dated 3/17/65.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Don Cunningham
Sent: Tuesday, April 02, 2013 4:56 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] R-4 and T4X Station

Since we have had a thread on "near mint" rigs lately, I got to thinking that I should offer a set I bought the other day before I get into them very much. I have a nice, complete early set of Drakes from 1965, by the QC tags on the receiver and transmitter. It came from the estate of Jim Brooks, W5PYH, an IBM employee in the Oklahoma City area. It has NOT been fired up since coming from Jim's station, and the friend of mine that bought it last year didn't want the set, he was just helping the widow "get rid of" all the stuff.

I am curious if anyone is interested in the set, consisting of:

R-4 s/n 0678, QC tag dated 3/1/65 Excellent condition with the exception of the top cover. Apparently, in a move, it took a real shock on the top, damaging it slightly in 3 or 4 places. Hard to see in pictures, but it is there. VERY minimal corrosion on the top of the chassis, one of the best I have ever seen. Again, shiny and hard to see in photos, but there.

T-4X s/n 10441, QC tag dated 26/10/5 which coorelates to October 26, 1965. Excellent condition also, with VERY minimal pitting on the chassis top. Again hard to see in photos as it is so nice and shiny.

AC-3 s/n 18731 and MS-3 (no tag on front grille and not as deep as the MS-4) both in VERY nice, original shape.

Downsides: the cover on the R-4. Looks so nice that my friend hadn't even noticed the damage. The SK was a technician (or engineer, I really didn't know him) and worked on his own gear. The can capacitors in both the R-4 and T-4X have been bridged under the chassis with modern caps. NO other mods/repair noted during my inspection. The T-4X manual is a reprint, and the R-4 manual although original has an earlier s/n on the cover, so didn't come with this rig. Schematic is of the right vintage in the case of the R-4, not sure of the reprint.

For pricing, I would consider about what WB4HFN shows on his resale charts as "average", $425 picked up in Southwestern Oklahoma. If you insist on shipping it, it would have to ship in 4 boxes, and I could take it to a private shipper I have used as he packs well. All packing/shipping is your responsibility. I would get pricing first, as it will not be cheap, but it will arrive well packed and not damaged any further.

If no interest on the list at that price, I'll advertise elsewhere or refurb it and build another shelf, HI. I am being honest as I can, and have a NUMBER of pictures I would share with a serious buyer. This is one of the nicest sets I have seen in many years of fooling with these old Drakes, so if you want a nice example of this vintage rig, let me know. I found in some other stuff I bought from that estate an 8" x 10" color shot of this station in Jim's shack years ago.

BTW, I did share the s/n data with WB4HFN.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3267 / Virus Database: 3161/6220 - Release Date: 04/02/13

[Non-text portions of this message have been removed]

12958. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 01:07:01 UTC
From: Don Cunningham
Topic: 12948 Message: 12958

I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.

I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3267 / Virus Database: 3162/6221 - Release Date: 04/02/13

[Non-text portions of this message have been removed]

12959. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 02:47:39 UTC
From: VE3AX/7
Topic: 12900 Message: 12959

Oops – thought this was TR-4C for some reason. There are no dial levers – just friction fit – but the idea is the same. Hold the dial and rotate the knob until the indicated frequency is on a known frequency from another source like a signal generator. That assumes that the frequency is off 30 khz on ALL bands.

73

Peter
VE3AX/7

From: VE3AX/7
Sent: Tuesday, April 02, 2013 6:45 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Claude:

Been following this thread through but may have missed something....

Are you SURE you're off 30 Khz on 40m ONLY? I don't recall seeing anywhere where you said specifically it was "on frequency" on the other bands.

If it's off 30 Khz on the other bands as well, and remember the bands dial different directions on 80 and 20m (if memory serves me right - I know, I know, I should go and look at one!), then the fix is easy – just reset the dials using the dial release levers to a known frequency.
Just seems hard to believe the xtal is off by 30 Khz!

Different story altogether IF it is off ONLY on 40m.

73
Peter
VE3AX/7

From: claudewelsch
Sent: Tuesday, April 02, 2013 1:13 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4

Hi Garey,

The error was on my side! I don't know why I was convinced that the receive frequency was right and the TX 30 kHz off (probably because nobody ever answered me when I called on 40m...) but the RX frequency is off too! I just used my other transceiver to send and I found the truth!
I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.

Sorry for the mistake.

Claude
LX1EX

--- In mailto:DrakeRadio%40yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> I screwed up that conversion scheme. The actual mix is BAND Osc (21.5
> MHz) - PTO (5.5 MHz) = 16 MHz in Mixer V1, then LO (16 MHz) - CO (9
> MHz) = 7 MHz in Mixer V4. I hope I haven't confused you more! :-)
> Also thanks to those who explained my abbreviations.
>
> I believe this also debunks my theory for the R / T frequency shift,
> which was weak at best. That one really has me stumped. ANYBODY
> HELP!?!?!
>
> Someone else answered the 'wrong' sideband question. Because of the
> mixing scheme, some bands have the sideband inverted while others do
> not, depending upon the frequencies involved. The USB / LSB lights
> denote which sideband is being transmitted.
>
> The lightsare necessary because Mixer V4 inverts the sideband on 80M
> but does not invert on all the other bands. So if you select the USB
> filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
> 40, you have to change the filterto the LSB filter. If you select the
> LSB filter you have LSB on 40, 20, 15 and 10M so you have to change
> the filter to the USB for all but 40M. Lastly to get LSB on 80M you
> have to again select the USB filter which makes everything right from
> 20M and up. Very confusing.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position of the switch in the schematics is a bit misleading, so I didn't see this at first.
> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> >
> > LX1EX
> > Claude
> >
> > --- In mailto:DrakeRadio%40yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Claude -
> >>
> >> OK. I guess I missed your 'fixed' message! Glad you have it going.

> >>
> >> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
> >> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> >> should change from receiveto transmit. Possibly a spurious output
> >> from the crystal? I'm at a loss, perhaps someone else will have an idea??
> >>
> >> I don't know if your sideband reversal is related to the above
> >> somehow, but it certainly is suspicious. My initial reaction would be
> >> to leave the switch wiring alone, unless it shows evidence of being
> >> 'adjusted' by a previous owner. I would say that is highly unlikely.
> >>
> >> There may be some connection with the fact that the LO is at 14.5
> >> MHz..... I wonder if the transmit mixer has been mistuned to the LO
> >> rather than 40M. So the receivemixer is tuned properly, but the
> >> transmit mixer is not. Check the transmit mixer alignment relative to
> >> 40M for starters and let us know what you find.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> claudewelsch wrote:
> >>> Hello Garey,
> >>>
> >>> I have two further problems with my TR-4, maybe you can help:
> >>>
> >>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency.
When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the
schematics and there is no crystal for the 40m band!
> >>>
> >>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband
switch, but should it not be automatically right.
> >>> With the Sideband switch on the left position i have:
> >>> 80 m LOWER correct
> >>> 40 m UPPER NOT correct
> >>> 20 m LOWER NOT correct
> >>> 15 m UPPER correct
> >>> 10 m UPPER correct
> >>> 10 m UPPER correct
> >>> 10 m UPPER correct
> >>>
> >>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> >>>
> >>> 73s
> >>> LX1EX
> >>> Claude
> >>>

> >
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> >
> > ------------------------------------
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> > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

12960. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 03:15:50 UTC
From: Don Cunningham
Topic: 12948 Message: 12960

My thanks to the moderators for the bandwidth offering my Drake station for the collectors. I guess they are all on Ebay, hi. No response except to challenge the build date, but I really didn't expect one. I'll just fire it up and see how it works and enjoy it myself.
73 all,
Don

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3267 / Virus Database: 3162/6221 - Release Date: 04/02/13

[Non-text portions of this message have been removed]

12961. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 06:04:45 UTC
From: dodgy_dxer
Topic: 12900 Message: 12961

Dear Claude

Send an email to vincentvoy@... or call +44 208 393 0545

He has a small ad in the RSGB magazine every month and also sells "standard" crystals on eBay (like 10MHz etc) which I have bought from him

He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.

I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!

No import taxes on goods sent form UK to LUX either!

73 Fred
G4BWP - A65BD

--- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@...> wrote:

> I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
>
> Sorry for the mistake.
>
> Claude
> LX1EX

12962. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 08:17:13 UTC
From: claudewelsch
Topic: 12900 Message: 12962

Thanks for the tip, Fred, I'll contact him.

--- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@...> wrote:
>
> Dear Claude
>
> Send an email to vincentvoy@... or call +44 208 393 0545
>
> He has a small ad in the RSGB magazine every month and also sells "standard" crystals on eBay (like 10MHz etc) which I have bought from him
>
> He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.
>
> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!
>
> No import taxes on goods sent form UK to LUX either!
>
> 73 Fred
> G4BWP - A65BD
>
> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
>
> > I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
> >
> > Sorry for the mistake.
> >
> > Claude
> > LX1EX
>

12963. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 08:21:23 UTC
From: claudewelsch
Topic: 12900 Message: 12963

It is off on 40m only, it's certainly the crystal...

--- In DrakeRadio@yahoogroups.com, "VE3AX/7" <ve3ax@...> wrote:
>
> Oops â□" thought this was TR-4C for some reason. There are no dial levers â□" just friction fit â□" but the idea is the same. Hold the dial and rotate the knob until the indicated frequency is on a known frequency from another source like a signal generator. That assumes that the frequency is off 30 khz on ALL bands.
>
> 73
>
> Peter
> VE3AX/7
>
> From: VE3AX/7
> Sent: Tuesday, April 02, 2013 6:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: Frequency shift R to T in TR-4
>
> Claude:
>
> Been following this thread through but may have missed something....
>
> Are you SURE youâ□□re off 30 Khz on 40m ONLY? I donâ□□t recall seeing anywhere where you said specifically it was â□□on frequencyâ□□ on the other bands.
>
> If itâ□□s off 30 Khz on the other bands as well, and remember the bands dial different directions on 80 and 20m (if memory serves me right - I know, I know, I should go and look at one!), then the fix is easy â□" just reset the dials using the dial release levers to a known frequency.
> Just seems hard to believe the xtal is off by 30 Khz!
>
> Different story altogether IF it is off ONLY on 40m.
>
> 73
> Peter
> VE3AX/7
>
>
>
> From: claudewelsch
> Sent: Tuesday, April 02, 2013 1:13 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Re: Frequency shift R to T in TR-4
>
>

> Hi Garey,
>
> The error was on my side! I don't know why I was convinced that the receive frequency was right and the TX 30 kHz off (probably because nobody ever answered me when I called on 40m...) but the RX frequency is off too! I just used my other transceiver to send and I found the truth!
> I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
>
> Sorry for the mistake.
>
> Claude
> LX1EX
>
> --- In mailto:DrakeRadio%40yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Claude -
> >
> > I screwed up that conversion scheme. The actual mix is BAND Osc (21.5
> > MHz) - PTO (5.5 MHz) = 16 MHz in Mixer V1, then LO (16 MHz) - CO (9
> > MHz) = 7 MHz in Mixer V4. I hope I haven't confused you more! :-)
> > Also thanks to those who explained my abbreviations.
> >
> > I believe this also debunks my theory for the R / T frequency shift,
> > which was weak at best. That one really has me stumped. ANYBODY
> > HELP!?!?!
> >
> > Someone else answered the 'wrong' sideband question. Because of the
> > mixing scheme, some bands have the sideband inverted while others do
> > not, depending upon the frequencies involved. The USB / LSB lights
> > denote which sideband is being transmitted.
> >
> > The lightsare necessary because Mixer V4 inverts the sideband on 80M
> > but does not invert on all the other bands. So if you select the USB
> > filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
> > 40, you have to change the filterto the LSB filter. If you select the
> > LSB filter you have LSB on 40, 20, 15 and 10M so you have to change
> > the filter to the USB for all but 40M. Lastly to get LSB on 80M you
> > have to again select the USB filter which makes everything right from
> > 20M and up. Very confusing.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > claudewelsch wrote:
> > > Ok, Garey. I'll check this in the evening. Ok, there is a crystal for 40 m, just none for 80 m and 20 m. The position

of the switch in the schematics is a bit misleading, so I didn't see this at first.
> > > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> > >
> > > LX1EX
> > > Claude
> > >
> > > --- In mailto:DrakeRadio%40yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Claude -
> > >>
> > >> OK. I guess I missed your 'fixed' message! Glad you have it going.
> > >>
> > >> Your 40M problem is vexing! There IS a crystal (21.5 MHz) for 40M.
> > >> 21.5 MHz - (9 MHz [CO] + 5.5 MHz [PTO] = 14.5 MHz) = 7.0 MHz. Nothing
> > >> should change from receiveto transmit. Possibly a spurious output
> > >> from the crystal? I'm at a loss, perhaps someone else will have an idea??
> > >>
> > >> I don't know if your sideband reversal is related to the above
> > >> somehow, but it certainly is suspicious. My initial reaction would be
> > >> to leave the switch wiring alone, unless it shows evidence of being
> > >> 'adjusted' by a previous owner. I would say that is highly unlikely.
> > >>
> > >> There may be some connection with the fact that the LO is at 14.5
> > >> MHz..... I wonder if the transmit mixer has been mistuned to the LO
> > >> rather than 40M. So the receivemixer is tuned properly, but the
> > >> transmit mixer is not. Check the transmit mixer alignment relative to
> > >> 40M for starters and let us know what you find.
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> claudewelsch wrote:
> > >>> Hello Garey,
> > >>>
> > >>> I have two further problems with my TR-4, maybe you can help:
> > >>>
> > >>> 1) On 40m, the transmit signal is 30 kHz off the dial and the received frequency. When I'im receiving at 7,200 MHz, I am transmitting at 7,1700 MHz. I checked on the schematics and there is no crystal for the 40m band!
> > >>>
> > >>> 2) The Sideband is not correct on all bands. I can of course switch with the Sideband switch, but should it not be automatically right.
> > >>> With the Sideband switch on the left position i have:
> > >>> 80 m LOWER correct
> > >>> 40 m UPPER NOT correct
> > >>> 20 m LOWER NOT correct
> > >>> 15 m UPPER correct
> > >>> 10 m UPPER correct

> > >>> 10 m UPPER correct
> > >>> 10 m UPPER correct
> > >>>
> > >>> Shall I invert the solder connections for S1A FRONT and REAR switch for 40m and 20m?
> > >>>
> > >>> 73s
> > >>> LX1EX
> > >>> Claude
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> [Non-text portions of this message have been removed]
>

12964. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 08:44:27 UTC
From: claudewelsch
Topic: 12900 Message: 12964

Hmm, after what you say, the 40m would be the only one that's wrong.
So why is 20m also wrong (see my list)?

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> Itis NOT possible for the TR-4 because of the mixing scheme. The SSB
> is generated at 9 MHz. Either Upper or Lower sideband is selectedat
> this frequency. The resultant signal is mixed in (V4) which inverts
> the sideband on all but 80M. LSB in, USB out. Or, USB in, LSB out.
> There is no 'historical' reason, it's just a fact of the design used.
> 'Modern'radios get around this by switching things around with tiny
> relays that weren't available in 1963.
>
> So you have to use the USB filter on 80M in order to get LSB out.
> Inverted.
>
> You have to use the LSB filter on 40M in order to get LSB out. No
> inversion.
>
> You have to use the USB filter on 20, 15 and 10M to get USB out. No
> inversion.
>
> So the USB filter could be used on all BUT 40M.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > I want to have:
> >
> > USB on 10m, 15m and 20m, LSB on 40m and 80m.
> >
> > This should be possible to do it automatically with the help of the bandswitch.
> >
> > There is a position of the Bandswitch to do this, but it is done incorrectly on 20m and
40m. Is there a historical reason for this ?

> >
> > Claude
> > LX1EX
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Mark -
> >>
> >> Thanks for clearing that up. I didn't do a very good job of
> >> explaining the SIDEBAND switching. The reason it works that way is
> >> because the sideband is inverted in the Mixer (V4) which inverts the
> >> sideband coming from the BMon 80M ONLY. So if you select the USB
> >> filter you'll be in USB on 40, 20, 15 and 10M. Since you want LSB on
> >> 40, you have to change the filter to the LSB filter. If you select
> >> the LSB filter you have LSB on 40, 20, 15 and 10M so you have to
> >> change the filter to the USB for all but 40M. Lastly to get LSB on 80M
> >> you have to again select the USB filter which makes everything right
> >> from 20M and up.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> Mark Pilant wrote:
> >>> Hi Claude.
> >>>
> >>> > 2) The Sideband is not correct on all bands. I can of course switch
> >>> > with the Sideband switch, but should it not be automatically right.
> >>> > With the Sideband switch on the left position i have:
> >>> > 80 m LOWER correct
> >>> > 40 m UPPER NOT correct
> >>> > 20 m LOWER NOT correct
> >>> > 15 m UPPER correct
> >>> > 10 m UPPER correct
> >>> > 10 m UPPER correct
> >>> > 10 m UPPER correct
> >>>
> >>> This is the same as my TR-4, and I believe my TR-3 as well; although I
> >>> haven't used my TR-3 for a while and I'm rebuilding the AC-3 at the
> >>> moment.
> >>>
> >>> As far as I know (and understand) the Sideband switch doesn't really
> >>> have defined settings. In other words, left is not LSB and right is
> >>> not USB. The sideband used is indicated by the Upper and Lower panel
> >>> lights, and the selection is by the Sideband switch.
> >>>
> >>> The TR-4 manual indicates this as well (on page 21; Operation) where
> >>> it says the Sideband control should be "On the desired sideband as

> >>> shown by the indicator lights."
> >>>
> >>> So I would say your switching is correct, but I have no idea why this
> >>> was done instead of having one Sideband switch setting be LSB and the
> >>> other be USB.
> >>>
> >>> > Is there a guide for the abbreviations somewhere (CO, PTO, LO) ?
> >>>
> >>> I seem to recall having first seen definitions for these in "older"
> >>> amateur radio handbooks (pick your favorite :-) I started using them
> >>> from the late 1950s. (I learned a lot from my father's 1959 ARRL
> >>> handbook.) I believe you will find:
> >>>
> >>> CO = Carrier Oscillator
> >>> PTO = Permeability Tuned Oscillator
> >>> LO = Local Oscillator
> >>>
> >>> 73
> >>>
> >>> - Mark N1VQW
> >>>
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> >>> Yahoo! Groups Links
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12965. calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 10:27:41 UTC
From: Fred
Topic: 12965 Message: 12965

The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated. TNX, Fred

12966. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 13:26:22 UTC
From: <w1es1982@...>
Topic: 12948 Message: 12966

Yours definitely has a lower number, so it's conceivable that they did test hundreds of units in a nearly three-week period. Given that this was a new model that was drastically different from the 2B that it replaced, I'm sure they had some queued up and waiting!

I've noticed, too, that Ron does not have the R-4 on his list but he did acknowledge my contribution of serial number to him.

BTW, performance-wise, my R-4 seems to be just as good as the R-4A and R-4B currently in my shack. I observe that the PTO seems to be a lot more stable than I anticipated, given that it's a tube version. The vernier drive preselector that was added later is certainly a nice touch but I have no problem peaking the preselector without it.

73,

Steve, W1ES/4

---- Don Cunningham <donc@...> wrote:
> I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.
>
> I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3267 / Virus Database: 3162/6221 - Release Date: 04/02/13
>
>
> [Non-text portions of this message have been removed]
>

12967. Re: [DrakeRadio] calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 13:51:53 UTC
From: <w1es1982@...>
Topic: 12965 Message: 12967

Fred -

If you have a scope, check the output to see what you've got. There should be a square-wave signal at 25 kHz.

Crystals do go bad sometimes, so if there's no output coming into the IC and the transistor seems to have normal junction readings on a DMM, I'd look at that. The crystal is a common 100 kHz unit and there are lots of them available on eBay and elsewhere.

Good luck...

Steve, W1ES/4
---- Fred <w5htr@...> wrote:
> The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated. TNX, Fred
>

12968. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 13:51:28 UTC
From: VE3AX/7
Topic: 12948 Message: 12968

Don:

Based on you original post it looks like the date format Drake used on the QC tags at the time was dd/mm/yy, or dd/mm/y in the T-4X case, and with the R-4 stated as 3/1/65 per your 1st post, that translates to January 3, 65, not March 1, 65. Looks like there is almost 3 months, not 3 weeks, between the inspection dates on your new find and Steve's.

73

Peter
VE3AX/7

From: w1es1982@...
Sent: Wednesday, April 03, 2013 6:26 AM
To: DrakeRadio@yahoogroups.com
Cc: Don Cunningham
Subject: Re: [DrakeRadio] R-4 and T4X Station

Yours definitely has a lower number, so it's conceivable that they did test hundreds of units in a nearly three-week period. Given that this was a new model that was drastically different from the 2B that it replaced, I'm sure they had some queued up and waiting!

I've noticed, too, that Ron does not have the R-4 on his list but he did acknowledge my contribution of serial number to him.

BTW, performance-wise, my R-4 seems to be just as good as the R-4A and R-4B currently in my shack. I observe that the PTO seems to be a lot more stable than I anticipated, given that it's a tube version. The vernier drive preselector that was added later is certainly a nice touch but I have no problem peaking the preselector without it.

73,

Steve, W1ES/4

---- Don Cunningham <mailto:donc%40martineer.net> wrote:
> I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.
>
> I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
> 73,
> Don, WB5HAK
>
>
> -----

> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3267 / Virus Database: 3162/6221 - Release Date: 04/02/13
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

12969. Re: [DrakeRadio] calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 14:21:09 UTC
From: Garey Barrell
Topic: 12965 Message: 12969

Fred -

Check C190.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fred wrote:
> The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated.
TNX, Fred
>
>

12970. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 14:40:32 UTC
From: Garey Barrell
Topic: 12948 Message: 12970

It probably depended upon who did the final test. Everything I've seen from Drake was in the 'US' mm/dd/yy format. It's certainly possible thoughthat a military or European person did some of the final test.

The R-4 wasn't really shipped until early 1965. The first schematic I have is dated Oct 1964, but was 'Preliminary'. The first 'almost official' schematic was dated 2/7/65. Perhaps production was begun, important changes were made and shipping was halted, and those still on hand were 'updated'. Strictly a guess, but feasible.

According to MY list, s/n 936 had a QC Date of 3/17/65, so there were a bunch shipped in March.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Don:
>
> Based on you original post it looks like the date format Drake used on the QC tags at the time was dd/mm/yy, or dd/mm/y in the T-4X case, and with the R-4 stated as 3/1/65 per your 1st post, that translates to January 3, 65, not March 1, 65. Looks like there is almost 3 months, not 3 weeks, between the inspection dates on your new find and Steve’s.
>
> 73
>
> Peter
> VE3AX/7
>
> From: w1es1982@...
> Sent: Wednesday, April 03, 2013 6:26 AM
> To: DrakeRadio@yahoogroups.com
> Cc: Don Cunningham
> Subject: Re: [DrakeRadio] R-4 and T4X Station
>
>
> Yours definitely has a lower number, so it's conceivable that they did test hundreds of units in a nearly three-week period. Given that this was a new model that was drastically different from the 2B that it replaced, I'm sure they had some queued up and waiting!
>
> I've noticed, too, that Ron does not have the R-4 on his list but he did acknowledge my

contribution of serial number to him.
>
> BTW, performance-wise, my R-4 seems to be just as good as the R-4A and R-4B currently in my shack. I observe that the PTO seems to be a lot more stable than I anticipated, given that it's a tube version. The vernier drive preselector that was added later is certainly a nice touch but I have no problem peaking the preselector without it.
>
> 73,
>
> Steve, W1ES/4
>
> ---- Don Cunningham <mailto:donc%40martineer.net> wrote:
>> I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.
>>
>> I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
>> 73,
>> Don, WB5HAK
>>

12971. Re: [DrakeRadio] R-4 Build

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-03 16:07:07 UTC
From: Chgypsy@...
Topic: 12971 Message: 12971

k4oah@... writes:

According to MY list, s/n 936 had a QC Date of 3/17/65, so there were a bunch shipped in March.
73, Garey - K4OAH
Interesting subject to me as FWIW I have R4 # 270 (sorry no cardboard for build)

Carry your thought a step further. Dayton Hamvention was in April back then. Drake had the corner booth where Icom has been for the last few years. They would have also shipped to dealers??
Carl wd8nhk

[Non-text portions of this message have been removed]

12972. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 00:50:18 UTC
From: Steve Wedge
Topic: 12948 Message: 12972

Yep - that's my R-4 (936). First Drake set I've ever owned that had its original tag. It also has an Allied tag.

It's in near-mint condition and has the speaker that was bought with it.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 03, 2013 10:40 AM
Subject: Re: [DrakeRadio] R-4 and T4X Station

It probably depended upon who did the final test. Everything I've
seen from Drake was in the 'US' mm/dd/yy format. It's certainly
possible thoughthat a military or European person did some of the
final test.

The R-4 wasn't really shipped until early 1965. The first schematic I
have is dated Oct 1964, but was 'Preliminary'. The first 'almost
official' schematic was dated 2/7/65. Perhaps production was begun,
important changes were made and shipping was halted, and those still
on hand were 'updated'. Strictly a guess, but feasible.

According to MY list, s/n 936 had a QC Date of 3/17/65, so there were a bunch shipped in March.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Don:
>
> Based on you original post it looks like the date format Drake used on the QC tags at the time was dd/mm/yy, or dd/mm/y in the T-4X case, and with the R-4 stated as 3/1/65 per your 1st post, that translates to January 3, 65, not March 1, 65. Looks like there is almost 3 months, not 3 weeks, between the inspection dates on your new find and Steve’s.
>
> 73

>
> Peter
> VE3AX/7
>
> From: w1es1982@...
> Sent: Wednesday, April 03, 2013 6:26 AM
> To: DrakeRadio@yahoogroups.com
> Cc: Don Cunningham
> Subject: Re: [DrakeRadio] R-4 and T4X Station
>
>
> Yours definitely has a lower number, so it's conceivable that they did test hundreds of units in a nearly three-week period. Given that this was a new model that was drastically different from the 2B that it replaced, I'm sure they had some queued up and waiting!
>
> I've noticed, too, that Ron does not have the R-4 on his list but he did acknowledge my contribution of serial number to him.
>
> BTW, performance-wise, my R-4 seems to be just as good as the R-4A and R-4B currently in my shack. I observe that the PTO seems to be a lot more stable than I anticipated, given that it's a tube version. The vernier drive preselector that was added later is certainly a nice touch but I have no problem peaking the preselector without it.
>
> 73,
>
> Steve, W1ES/4
>
> ---- Don Cunningham <mailto:donc%40martineer.net> wrote:
>> I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.
>>
>> I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
>> 73,
>> Don, WB5HAK
>>

[Non-text portions of this message have been removed]

12973. Re: [DrakeRadio] R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 01:00:04 UTC
From: Steve Wedge
Topic: 12948 Message: 12973

Could have been a different person, but mine is "3/17/65"

That would indicate traditional American date format.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: VE3AX/7
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 03, 2013 9:51 AM
Subject: Re: [DrakeRadio] R-4 and T4X Station

Don:

Based on you original post it looks like the date format Drake used on the QC tags at the time was dd/mm/yy, or dd/mm/y in the T-4X case, and with the R-4 stated as 3/1/65 per your 1st post, that translates to January 3, 65, not March 1, 65. Looks like there is almost 3 months, not 3 weeks, between the inspection dates on your new find and Steve’s.

73

Peter
VE3AX/7

From: w1es1982@...
Sent: Wednesday, April 03, 2013 6:26 AM
To: DrakeRadio@yahoogroups.com
Cc: Don Cunningham
Subject: Re: [DrakeRadio] R-4 and T4X Station

Yours definitely has a lower number, so it's conceivable that they did test hundreds of units in a nearly three-week period. Given that this was a new model that was drastically different from the 2B that it replaced, I'm sure they had some queued up and waiting!

I've noticed, too, that Ron does not have the R-4 on his list but he did acknowledge my contribution of serial number to him.

BTW, performance-wise, my R-4 seems to be just as good as the R-4A and R-4B currently in my shack. I observe that the PTO seems to be a lot more stable than I anticipated, given that it's a tube version. The vernier drive preselector that was added later is certainly a nice touch but I have no problem peaking the preselector without it.

73,

Steve, W1ES/4

---- Don Cunningham <mailto:donc%40martineer.net> wrote:
> I agree, that doesn't sound possible, Steve. Mine is definitely dated March 1, 1965, with serial number penned in the same hand. Ron has no R-4's on his list at all, so no way to check it with his list. The T-4X did check in the same time frame as the closest on Ron's list.
>
> I don't know how to tell which is correct, mine or yours, but there does seem to be a discrepancy.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3267 / Virus Database: 3162/6221 - Release Date: 04/02/13
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12974. Re: [DrakeRadio] calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 01:03:28 UTC
From: Steve Wedge
Topic: 12965 Message: 12974

I just received another R-4B with a non-working calibrator - or so it seems.

The set is in very good shape, cosmetically and only has this fault, dirty bandswitch and some AC on the audio. Should be an easy rehab. Ordering a re-cap kit shortly.

I'll post what I find with the calibrator.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 03, 2013 10:21 AM
Subject: Re: [DrakeRadio] calibrator on R-4B not working properly

Fred -

Check C190.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Fred wrote:
> The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated.
TNX, Fred
>
>

[Non-text portions of this message have been removed]

12975. TR-4 output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 01:09:33 UTC
From: Steve Wedge
Topic: 12975 Message: 12975

It seems the neutralisation is off on a recently-received TR-4. I can get barely 20W out on 10, but over 200W on 40. Max output definitely not coincidental with the plate dip, even on 20.

Receive on 10 seems very weak as well. I'm not ruling out someone having "played" with this one. This is the first TR-4 I've played with in a long time, so I'm expecting to learn some...

Can I rule out soft finals?

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!

[Non-text portions of this message have been removed]

12976. Re: [DrakeRadio] TR-4 output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 02:01:45 UTC
From: Garey Barrell
Topic: 12975 Message: 12976

Steve-

If you're getting much morethan 200W on 40M I'd investigate your power measuring! Very rarely do they put out over 200W on any band.

What is your output on 15M. Soft finals usually cause 15 to dropsome at the same time. If ONLY 10M, probably just neutralization?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> It seems the neutralisation is off on a recently-received TR-4. I can get barely 20W out on 10, but over 200W on 40. Max output definitely not coincidental with the plate dip, even on 20.
>
> Receive on 10 seems very weak as well. I'm not ruling out someone having "played" with this one. This is the first TR-4 I've played with in a long time, so I'm expecting to learn some...
>
> Can I rule out soft finals?
>
>

12977. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 06:18:03 UTC
From: claudewelsch
Topic: 12900 Message: 12977

Hello Fred,

I ordered the crystal. It's £10, postage to France included.

73's

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@...> wrote:
>
> Dear Claude
>
> Send an email to vincentvoy@... or call +44 208 393 0545
>
> He has a small ad in the RSGB magazine every month and also sells "standard" crystals on eBay (like 10MHz etc) which I have bought from him
>
> He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.
>
> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!
>
> No import taxes on goods sent form UK to LUX either!
>
> 73 Fred
> G4BWP - A65BD
>
> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
>
> > I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
> >
> > Sorry for the mistake.
> >
> > Claude
> > LX1EX
>

12978. Re: [DrakeRadio] TR-4 output

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 11:41:00 UTC
From: Steve Wedge
Topic: 12975 Message: 12978

Yep - after i posted this, realized I was on the wrong antenna. D'oh!

Looks like the finals are toast: only getting 120W on 40 and about the same on 20, with the xmit gain all the way up, CW mode, no key in jack. It takes over 500ma to get there. I don't doubt the neut is off as well and probably contributed to their demise.

15 is dead so I can't tell yet. I did receive for a few seconds and haven't been able to coax it back into receive yet. Receive on 10 is very weak - can barely hear the calibrator.

I suspect someone who shouldn't have, went through this rig with a tweaker.

This rig looks really nice, so it will be worth digging into.

While I have everyone's attention, who's got the best prices on 6JB6's these days who's also reliable?

TNX es 73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 03, 2013 10:01 PM
Subject: Re: [DrakeRadio] TR-4 output

Steve-

If you're getting much morethan 200W on 40M I'd investigate your power
measuring! Very rarely do they put out over 200W on any band.

What is your output on 15M. Soft finals usually cause 15 to dropsome
at the same time. If ONLY 10M, probably just neutralization?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> It seems the neutralisation is off on a recently-received TR-4. I can get barely 20W out on 10, but over 200W on 40. Max output definitely not coincidental with the plate dip, even on 20.

>
> Receive on 10 seems very weak as well. I'm not ruling out someone having "played" with this one. This is the first TR-4 I've played with in a long time, so I'm expecting to learn some...
>
> Can I rule out soft finals?
>
>

[Non-text portions of this message have been removed]

12979. Re: calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 12:31:45 UTC
From: mvgilger
Topic: 12965 Message: 12979

Steve,
If you need the IC1 or IC2, they can still be obtained from:

http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm

You might also try strapping it for 50kc instead of the normal 25kc to see if that works. It's a simple one wire jumper.

Regards,
Mark, WB0IQK

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> I just received another R-4B with a non-working calibrator - or so it seems.
>
> The set is in very good shape, cosmetically and only has this fault, dirty bandswitch and some AC on the audio. Should be an easy rehab. Ordering a re-cap kit shortly.
>
> I'll post what I find with the calibrator.
>
> Steve Wedge, W1ES/4
>
> "I can't complain, but sometimes I still do."
> - Joe Walsh
>
> If the above message appears, it came from Steve's Son of Laptop!
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, April 03, 2013 10:21 AM
> Subject: Re: [DrakeRadio] calibrator on R-4B not working properly
>
>
>
>
> Fred -
>
> Check C190.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Fred wrote:

> > The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated. TNX, Fred
> >
> >
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

12980. Re: FS: Drake

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 13:37:57 UTC
From: let freedom ring
Topic: 12107 Message: 12980

Hello,
Was wondering if you still have the P/S ms-4? If so let me know what it would cost to get it to Col,Oh 43224 and what method of payment you accept.
tnx, 73
Mike KD8MTU

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> The following is from a good friend of mine in Atlanta. Contact him if interested.
> --
> 73, Garey - K4OAH
> Glen Allen, VA
>
>
>
> I am helping to dispose of some amateur radio equipment for an estate located in Atlanta, GA.
> If you have an interest in any of this equipment let me know and I will provide you with more
> details. I have not had time to check any of it out and can send some pictures of it. I would
> recommend you go to www.rigpix.com to get some detailed information one each.
>
> I will not have it picked up or checked out prior to upcoming Dalton Hamfest and will not be
> bring any of it to that hamfest. Some of the smaller items can be shipped but I would prefer
> pickup either at my home or at the home of the widow who lives in the Buckhead area of Atlanta.
>
> Tom Koch - W4UOC
> 404-314-6109
> w4uoc@...
>
>
>
>
> Mfg Type Model Listing Price
>
> Drake Antenna Tuner MN-2000 $214.00
> Drake Receiver R4-C $344.00
> Drake Transmitter T-4X $166.00
> Drake P/S Speaker MS-4 $70.00
> Drake Transmitter TR-3 $201.00
>

12981. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 14:08:17 UTC
From: Garey Barrell
Topic: 12900 Message: 12981

Claude / Fred -

Good information!! That's considerably less than here, plus First
Class postage to send a 2 ounce Drake CD to EU now is almost $7.

Please let us know how the quality and accuracy comes out!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Hello Fred,
>
> I ordered the crystal. It's ?10, postage to France included.
>
> 73's
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@...> wrote:
>> Dear Claude
>>
>> Send an email to vincentvoy@... or call +44 208 393 0545
>>
>> He has a small ad in the RSGB magazine every month and also sells "standard" crystals on eBay (like 10MHz etc) which I have bought from him
>>
>> He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.
>>
>> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!
>>
>> No import taxes on goods sent form UK to LUX either!
>>
>> 73 Fred
>> G4BWP - A65BD
>>
>> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
>>
>>> I guess it's the crystal then. Does anybody know a good source for crystals. I asked

Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
>>>
>>> Sorry for the mistake.
>>>
>>> Claude
>>> LX1EX
>>

12982. Re: [DrakeRadio] Re: No good output... [REVISED]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 15:14:26 UTC
From: Garey Barrell
Topic: 12900 Message: 12982

Claude -

It is NOT possible for the TR-4 because of the mixing scheme. The SSB is generated at 9 MHz. Either Upper or Lower sideband is selected at this frequency. The resultant signal is mixed in (V4) which inverts the sideband on 40, 15 & 10M. LSB in, USB out. Or, USB in, LSB out. There is no 'historical' reason, it's just a fact of the design used.

I believe the below information is correct. (Finally!) If someone has a TR-3/4 available, I'd appreciate a 'reality check'! It appears that the 'non -x' side is the true LSB filter.

You have to use the LSB filter on 80M in order to get LSB out. No inversion. [blank]

You have to use the USB filter on 40M in order to get LSB out. Inverted. [-x]

You have to use the USB filter on 20M to get USB out. No inversion. [-x]

You have to use the LSB filter on 15 & 10M to get USB out. Inverted. [blank]

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

12983. Re: [DrakeRadio] Re: No good output... [REVISED]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 16:48:46 UTC
From: John Lawrence
Topic: 12900 Message: 12983

Garey,

I have a TR-3 and you are correct about the Side Band filters. It makes one get confused the way they do it.

On Thu, Apr 4, 2013 at 11:14 AM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> Claude -
>
> It is NOT possible for the TR-4 because of the mixing scheme. The SSB
> is generated at 9 MHz. Either Upper or Lower sideband is selected at
> this frequency. The resultant signal is mixed in (V4) which inverts
> the sideband on 40, 15 & 10M. LSB in, USB out. Or, USB in, LSB out.
> There is no 'historical' reason, it's just a fact of the design used.
>
> I believe the below information is correct. (Finally!) If someone
> has a TR-3/4 available, I'd appreciate a 'reality check'! It appears
> that the 'non -x' side is the true LSB filter.
>
> You have to use the LSB filter on 80M in order to get LSB out. No
> inversion. [blank]
>
> You have to use the USB filter on 40M in order to get LSB out.
> Inverted. [-x]
>
> You have to use the USB filter on 20M to get USB out. No inversion. [
> -x]
>
> You have to use the LSB filter on 15 & 10M to get USB out. Inverted.
> [blank]
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>

--
John

[Non-text portions of this message have been removed]

12984. Re: [DrakeRadio] Re: calibrator on R-4B not working properly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 19:24:23 UTC
From: Steve Wedge
Topic: 12965 Message: 12984

Tnx, Mark. I may need one, but I'm noticing in the manual that came with it that the PO may have disconnected the calibrator for some reason. It may be as simple as reconnecting a wire. I hope to find out shortly. If it turns out to be that simple, I'll only have to re-cap this one to get it up to snuff.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Apr 4, 2013, at 8:31 AM, "mvgilger" <mgilger@...> wrote:

> Steve,
> If you need the IC1 or IC2, they can still be obtained from:
>
> http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm
>
> You might also try strapping it for 50kc instead of the normal 25kc to see if that works. It's a simple one wire jumper.
>
> Regards,
> Mark, WB0IQK
>
> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
> >
> > I just received another R-4B with a non-working calibrator - or so it seems.
> >
> > The set is in very good shape, cosmetically and only has this fault, dirty bandswitch and some AC on the audio. Should be an easy rehab. Ordering a re-cap kit shortly.
> >
> > I'll post what I find with the calibrator.
> >
> > Steve Wedge, W1ES/4
> >
> > "I can't complain, but sometimes I still do."
> > - Joe Walsh
> >
> > If the above message appears, it came from Steve's Son of Laptop!
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, April 03, 2013 10:21 AM
> > Subject: Re: [DrakeRadio] calibrator on R-4B not working properly
> >
> >
> >
> > Fred -

> >
> > Check C190.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Fred wrote:
> > > The xtal calibrator on my R-4B started acting intermittently and seemed to emit the signal at weird frequencies. Ultimately, it quit working. Any help would be appreciated. TNX, Fred
> > >
> > >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>

[Non-text portions of this message have been removed]

12985. Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 20:33:27 UTC
From: claudewelsch
Topic: 12900 Message: 12985

Yes, we'll see. Here my offers for this particular crystal:

Jan Crystals: $35 & $10 shipping to France, 4-6 weeks

International Crystal MFG: $23.25 & $27.54 shipping (i would have given my US address because reshipping is less expensive) 3-4 weeks

VINCENT J/IG Electronic Design: £6.50 & £3.00 shipping 2 weeks

73s

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude / Fred -
>
> Good information!! That's considerably less than here, plus First
> Class postage to send a 2 ounce Drake CD to EU now is almost $7.
>
> Please let us know how the quality and accuracy comes out!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > Hello Fred,
> >
> > I ordered the crystal. It's £10, postage to France included.
> >
> > 73's
> >
> > Claude
> > LX1EX
> >
> > --- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@> wrote:
> >> Dear Claude
> >>
> >> Send an email to vincentvoy@ or call +44 208 393 0545
> >>
> >> He has a small ad in the RSGB magazine every month and also sells "standard" crystals

on eBay (like 10MHz etc) which I have bought from him
> >>
> >> He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.
> >>
> >> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!
> >>
> >> No import taxes on goods sent form UK to LUX either!
> >>
> >> 73 Fred
> >> G4BWP - A65BD
> >>
> >> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
> >>
> >>> I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
> >>>
> >>> Sorry for the mistake.
> >>>
> >>> Claude
> >>> LX1EX
> >>
>

12986. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-04 20:58:44 UTC
From: <w1es1982@...>
Topic: 12900 Message: 12986

Nine quid starts to look like a bargain...

Steve, W1ES/4

---- claudewelsch <clwelsch@...> wrote:
> Yes, we'll see. Here my offers for this particular crystal:
>
> Jan Crystals: $35 & $10 shipping to France, 4-6 weeks
>
> International Crystal MFG: $23.25 & $27.54 shipping (i would have given my US address because reshipping is less expensive) 3-4 weeks
>
> VINCENT J/IG Electronic Design: £6.50 & £3.00 shipping 2 weeks
>
> 73s
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
> >
> > Claude / Fred -
> >
> > Good information!! That's considerably less than here, plus First
> > Class postage to send a 2 ounce Drake CD to EU now is almost $7.
> >
> > Please let us know how the quality and accuracy comes out!!
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > claudewelsch wrote:
> > > Hello Fred,
> > >
> > > I ordered the crystal. It's £10, postage to France included.
> > >
> > > 73's
> > >
> > > Claude
> > > LX1EX
> > >

> > > --- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@> wrote:
> > >> Dear Claude
> > >>
> > >> Send an email to vincentvoy@ or call +44 208 393 0545
> > >>
> > >> He has a small ad in the RSGB magazine every month and also sells "standard" crystals on eBay (like 10MHz etc) which I have bought from him
> > >>
> > >> He is in UK, near London and makes crystals to order at a lot less than $45. He knows the Drake specs too.
> > >>
> > >> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR less than eBay sellers of years old used in the US!
> > >>
> > >> No import taxes on goods sent form UK to LUX either!
> > >>
> > >> 73 Fred
> > >> G4BWP - A65BD
> > >>
> > >> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
> > >>
> > >>> I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
> > >>>
> > >>> Sorry for the mistake.
> > >>>
> > >>> Claude
> > >>> LX1EX
> > >>>
> > >
> >
>

12987. Need 15m Crystal for TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 01:32:19 UTC
From: Steve Wedge
Topic: 12987 Message: 12987

It's good to have other Drake rigs around to swap parts into and out of.

My TR-4 is 100% dead on 15m. I took the crystal and put it into an auxiliary socket of one of my R-4B's and could not get it to peak anywhere. I took a crystal for 12m (35.6 MHz) from my R-4B and put it into the TR-4 and got peaking and signals. Of course, everything is off-frequency that way, but that verified that the band circuits are good and the XTAL is bad.

Does anyone have an extra TR-4 15m crystal they'd sell me for FMV? It's just easier than waiting for 9 - 5 and ordering by phone Otherwise, I'll go to ICM and order one. Nobody on eBay seems to have one at the moment...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

12988. Re: [DrakeRadio] Need 15m Crystal for TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 01:47:20 UTC
From: William Houghton
Topic: 12987 Message: 12988

Is it the same xtal as used in the TR-3?

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Thu, April 4, 2013 6:32:16 PM
Subject: [DrakeRadio] Need 15m Crystal for TR-4

It's good to have other Drake rigs around to swap parts into and out of.

My TR-4 is 100% dead on 15m. I took the crystal and put it into an auxiliary socket of one of my R-4B's and could not get it to peak anywhere. I took a crystal for 12m (35.6 MHz) from my R-4B and put it into the TR-4 and got peaking and signals. Of course, everything is off-frequency that way, but that verified that the band circuits are good and the XTAL is bad.

Does anyone have an extra TR-4 15m crystal they'd sell me for FMV? It's just easier than waiting for 9 - 5 and ordering by phone Otherwise, I'll go to ICM and order one. Nobody on eBay seems to have one at the moment...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

12989. Re: Need 15m Crystal for TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 07:05:21 UTC
From: claudewelsch
Topic: 12987 Message: 12989

Hello,

You could try VINCENT J/IG Electronic Design in Great Britain.

In my last post in <Frequency shift R to T in TR-4> I gave the prices I got from 3 companies.

73's

Claude

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> It's good to have other Drake rigs around to swap parts into and out of.
>
> My TR-4 is 100% dead on 15m. I took the crystal and put it into an auxiliary socket of one of my R-4B's and could not get it to peak anywhere. I took a crystal for 12m (35.6 MHz) from my R-4B and put it into the TR-4 and got peaking and signals. Of course, everything is off-frequency that way, but that verified that the band circuits are good and the XTAL is bad.
>
> Does anyone have an extra TR-4 15m crystal they'd sell me for FMV? It's just easier than waiting for 9 - 5 and ordering by phone Otherwise, I'll go to ICM and order one. Nobody on eBay seems to have one at the moment...
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
>

12990. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 08:48:20 UTC
From: claudewelsch
Topic: 12900 Message: 12990

Hello Garey,

I still have some oscillations on 10m so I went back to your recommendations. What do you mean by '...terminal strip, and shield hardware'?

The first ceramic feedthrough capacitor (650V) has already been replaced by a plastic tube. Is that any problem?

73's

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> Are you able to set the PA IDLE current per the instructions in
> Section IV. Para. A of the manual?
>
> It sounds like the PA is oscillating on 10M where you are getting 100W
> and 600 mA of plate current.
>
> If you haven't already, go through and check all screws to ensure they
> are tight, especially tube socket, terminal strip, and shield hardware.
>
> Are all tubes heating properly?
>
> If still a problem, I would strongly suggest disconnecting the PA
> Screen supply. The terminal is across from the filament fuse. There
> are a group of five terminals through the PA underchassis shield. The
> first one of the groupfrom the rear wall of the chassis, is the +650
> VDC, the second one is the Screen supply. This one needs to be
> disconnected CAREFULLY. Be sure and remove solder and do not apply
> any side stress on the ceramic feedthrough capacitor as they WILL
> crack. Once this is done, you can key the transmitter and work on all
> stages without damaging the PA tubes with too much current.
>
> If the receiver is working correctly on all bands, all but V4 and V6
> are 'almost' eliminated as the source of trouble. Voltage checks of
> these stages will eliminate DC problems.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> > On another receiver, I can hear the signal on 80 m resp. 40 m.
> > On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> > On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> > On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> > What is wrong here?
> > Does anybody know?
> > Happy Easter!
> >
> > Claude
> > LX1EX
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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>

12991. Re: [DrakeRadio] Re: Need 15m Crystal for TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 12:52:14 UTC
From: Steve Wedge
Topic: 12987 Message: 12991

Thanks, Claude. Yes, I remember you saying they sent one to you in France for nine and a half quid.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: claudewelsch
Sent: Friday, April 05, 2013 3:05 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Need 15m Crystal for TR-4

Hello,

You could try VINCENT J/IG Electronic Design in Great Britain.

In my last post in <Frequency shift R to T in TR-4> I gave the prices I got from 3 companies.

73's

Claude

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> It's good to have other Drake rigs around to swap parts into and out of.
>
> My TR-4 is 100% dead on 15m. I took the crystal and put it into an auxiliary socket of one of my R-4B's and could not get it to peak anywhere. I took a crystal for 12m (35.6 MHz) from my R-4B and put it into the TR-4 and got peaking and signals. Of course, everything is off-frequency that way, but that verified that the band circuits are good and the XTAL is bad.
>
> Does anyone have an extra TR-4 15m crystal they'd sell me for FMV? It's just easier than waiting for 9 - 5 and ordering by phone Otherwise, I'll go to ICM and order one. Nobody on eBay seems to have one at the moment...
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.

>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

12992. Re: [DrakeRadio] Need 15m Crystal for TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 13:06:41 UTC
From: Garey Barrell
Topic: 12987 Message: 12992

Yes!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Is it the same xtal as used in the TR-3?
>
>
>
>
> _____
> From: Steve Wedge <w1es1982@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thu, April 4, 2013 6:32:16 PM
> Subject: [DrakeRadio] Need 15m Crystal for TR-4
>
>
> It's good to have other Drake rigs around to swap parts into and out of.
>
> My TR-4 is 100% dead on 15m. I took the crystal and put it into an auxiliary
> socket of one of my R-4B's and could not get it to peak anywhere. I took a
> crystal for 12m (35.6 MHz) from my R-4B and put it into the TR-4 and got peaking
> and signals. Of course, everything is off-frequency that way, but that verified
> that the band circuits are good and the XTAL is bad.
>
> Does anyone have an extra TR-4 15m crystal they'd sell me for FMV? It's just
> easier than waiting for 9 - 5 and ordering by phone Otherwise, I'll go to ICM
> and order one. Nobody on eBay seems to have one at the moment...
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
> [Non-text portions of this message have been removed]
>
>

>
>
> [Non-text portions of this message have been removed]
>
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>
> Yahoo! Groups Links
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12993. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 13:13:22 UTC
From: Garey Barrell
Topic: 12900 Message: 12993

Claude -

Have you done the neutralization procedure from the manual?? The
hardware, typically sheet metal screws, that holds tube sockets,
terminal strips, metal shields between sections, etc. Many of the
terminal strips, sockets, etc. get their ground connections for the
strip, board, tubes, etc. These can loosen over time from heat/ cool
cycles and vibration, surfaces corrode, and therefore ground
connections get 'flaky'! Ensuring they are tight, and even if they are
loosening slightly can greatly improve grounding and therefore stability.

No, the 650VDC is too highfor the ceramic feedthroughs, so it gets
just an insulated tube.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Hello Garey,
>
> I still have some oscillations on 10m so I went back to your recommendations. What do you mean by '...terminal strip, and shield hardware'?
>
> The first ceramic feedthrough capacitor (650V) has already been replaced by a plastic tube. Is that any problem?
>
> 73's
>
> Claude
> LX1EX
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Claude -
>>
>> Are you able to set the PA IDLE current per the instructions in
>> Section IV. Para. A of the manual?
>>
>> It sounds like the PA is oscillating on 10M where you are getting 100W
>> and 600 mA of plate current.
>>
>> If you haven't already, go through and check all screws to ensure they

>> are tight, especially tube socket, terminal strip, and shield hardware.
>>
>> Are all tubes heating properly?
>>
>> If still a problem, I would strongly suggest disconnecting the PA
>> Screen supply. The terminal is across from the filament fuse. There
>> are a group of five terminals through the PA underchassis shield. The
>> first one of the groupfrom the rear wall of the chassis, is the +650
>> VDC, the second one is the Screen supply. This one needs to be
>> disconnected CAREFULLY. Be sure and remove solder and do not apply
>> any side stress on the ceramic feedthrough capacitor as they WILL
>> crack. Once this is done, you can key the transmitter and work on all
>> stages without damaging the PA tubes with too much current.
>>
>> If the receiver is working correctly on all bands, all but V4 and V6
>> are 'almost' eliminated as the source of trouble. Voltage checks of
>> these stages will eliminate DC problems.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
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>> claudewelsch wrote:
>>> I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
>>> On another receiver, I can hear the signal on 80 m resp. 40 m.
>>> On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
>>> On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
>>> On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
>>> What is wrong here?
>>> Does anybody know?
>>> Happy Easter!
>>>
>>> Claude
>>> LX1EX
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>>> Yahoo! Groups Links

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12994. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-05 21:21:09 UTC
From: claudewelsch
Topic: 12900 Message: 12994

Ok, I checked everything and it was tight. Can it be that a bad tube out of the three can cause oscillations? I tested the tubes in the T-4X and number 2 was definitely much weaker than number 1 and number 3.

73's

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> Have you done the neutralization procedure from the manual?? The
> hardware, typically sheet metal screws, that holds tube sockets,
> terminal strips, metal shields between sections, etc. Many of the
> terminal strips, sockets, etc. get their ground connections for the
> strip, board, tubes, etc. These can loosen over time from heat/ cool
> cycles and vibration, surfaces corrode, and therefore ground
> connections get 'flaky'! Ensuring they are tight, and even if they are
> loosening slightly can greatly improve grounding and therefore stability.
>
> No, the 650VDC is too highfor the ceramic feedthroughs, so it gets
> just an insulated tube.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> claudewelsch wrote:
> > Hello Garey,
> >
> > I still have some oscillations on 10m so I went back to your recommendations. What do you mean by '...terminal strip, and shield hardware'?
> >
> > The first ceramic feedthrough capacitor (650V) has already been replaced by a plastic tube. Is that any problem?
> >
> > 73's
> >
> > Claude
> > LX1EX
> >

> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Claude -
> >>
> >> Are you able to set the PA IDLE current per the instructions in
> >> Section IV. Para. A of the manual?
> >>
> >> It sounds like the PA is oscillating on 10M where you are getting 100W
> >> and 600 mA of plate current.
> >>
> >> If you haven't already, go through and check all screws to ensure they
> >> are tight, especially tube socket, terminal strip, and shield hardware.
> >>
> >> Are all tubes heating properly?
> >>
> >> If still a problem, I would strongly suggest disconnecting the PA
> >> Screen supply. The terminal is across from the filament fuse. There
> >> are a group of five terminals through the PA underchassis shield. The
> >> first one of the groupfrom the rear wall of the chassis, is the +650
> >> VDC, the second one is the Screen supply. This one needs to be
> >> disconnected CAREFULLY. Be sure and remove solder and do not apply
> >> any side stress on the ceramic feedthrough capacitor as they WILL
> >> crack. Once this is done, you can key the transmitter and work on all
> >> stages without damaging the PA tubes with too much current.
> >>
> >> If the receiver is working correctly on all bands, all but V4 and V6
> >> are 'almost' eliminated as the source of trouble. Voltage checks of
> >> these stages will eliminate DC problems.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> claudewelsch wrote:
> >>> I just got a TR-4 on ebay and have some problems with tuning in. The receiver part seems to work decent but transmitter output is erratic: On 40 and 80 m I have near 0W, plate current goes over 0.6A but PLATE and LOAD controls don't react, just XMIT gain and TUNE.
> >>> On another receiver, I can hear the signal on 80 m resp. 40 m.
> >>> On 20m I have 30W on my power meter, I hear the signal on 20 m but I have another signal, much much stronger on 2x frequncy, i.e. 10m. The PLATE has a dip corresponding to max. output.
> >>> On 15 m output is near OW, plate current is max. 0.2 A and no reaction on PLATE and LOAD control.
> >>> On 10 m I get 100 W output with a PLATE control at 3 and a LOAD at 2, RF GAIN fully counter clockwise! with a plate current going immediately up to 500 ma.
> >>> What is wrong here?

> >>> Does anybody know?
> >>> Happy Easter!
> >>>
> >>> Claude
> >>> LX1EX
> >>>
> >>>
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> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
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> > > Yahoo! Groups Links
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>

12995. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 08:02:27 UTC
From: Richard Knoppow
Topic: 12900 Message: 12995

----- Original Message -----
From: "claudewelsch" <clwelsch@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 05, 2013 2:21 PM
Subject: [DrakeRadio] Re: No good output with my new (old)
TR-4

> Ok, I checked everything and it was tight. Can it be that
> a bad tube out of the three can cause oscillations? I
> tested the tubes in the T-4X and number 2 was definitely
> much weaker than number 1 and number 3.
>
> 73's
>
> Claude
> LX1EX

That odd tube would bother me. Its worth replacing. If
you have a tester that measures Gm also called
transconductance, you can match tubes pretty well. The three
should be close. But also, they should be of the same make
if possible. There may be slight differences in the
structure of different makes of tubes of the same type which
can make neutralizing difficult.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

12996. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 08:20:28 UTC
From: claudewelsch
Topic: 12900 Message: 12996

I ordered new tubes and they are on their way. I just wanted to know if that can be the cause and I'll put the Drake TR-4 aside until I got new tubes, a new crystal and a new neon light. By the way I ordered a box of 10 Sylvania NE2-E, if someone need one, I can send it...

73's

Claude
LXEX

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "claudewelsch" <clwelsch@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 05, 2013 2:21 PM
> Subject: [DrakeRadio] Re: No good output with my new (old)
> TR-4
>
>
> > Ok, I checked everything and it was tight. Can it be that
> > a bad tube out of the three can cause oscillations? I
> > tested the tubes in the T-4X and number 2 was definitely
> > much weaker than number 1 and number 3.
> >
> > 73's
> >
> > Claude
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>
> That odd tube would bother me. Its worth replacing. If
> you have a tester that measures Gm also called
> transconductance, you can match tubes pretty well. The three
> should be close. But also, they should be of the same make
> if possible. There may be slight differences in the
> structure of different makes of tubes of the same type which
> can make neutralizing difficult.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

12997. Re: R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 09:44:02 UTC
From: claudewelsch
Topic: 12948 Message: 12997

Hello Don,

I'd be interested in the station, if you find an inexpensive way to mail it to me (in France).

Regards

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, "Don Cunningham" <donc@...> wrote:
>
> Since we have had a thread on "near mint" rigs lately, I got to thinking
> that I should offer a set I bought the other day before I get into them very
> much. I have a nice, complete early set of Drakes from 1965, by the QC tags
> on the receiver and transmitter. It came from the estate of Jim Brooks,
> W5PYH, an IBM employee in the Oklahoma City area. It has NOT been fired up
> since coming from Jim's station, and the friend of mine that bought it last
> year didn't want the set, he was just helping the widow "get rid of" all the
> stuff.
>
> I am curious if anyone is interested in the set, consisting of:
>
> R-4 s/n 0678, QC tag dated 3/1/65 Excellent condition with the exception of
> the top cover. Apparently, in a move, it took a real shock on the top,
> damaging it slightly in 3 or 4 places. Hard to see in pictures, but it is
> there. VERY minimal corrosion on the top of the chassis, one of the best I
> have ever seen. Again, shiny and hard to see in photos, but there.
>
> T-4X s/n 10441, QC tag dated 26/10/5 which coorelates to October 26, 1965.
> Excellent condition also, with VERY minimal pitting on the chassis top.
> Again hard to see in photos as it is so nice and shiny.
>
> AC-3 s/n 18731 and MS-3 (no tag on front grille and not as deep as the MS-4)
> both in VERY nice, original shape.
>
> Downsides: the cover on the R-4. Looks so nice that my friend hadn't even
> noticed the damage. The SK was a technician (or engineer, I really didn't
> know him) and worked on his own gear. The can capacitors in both the R-4
> and T-4X have been bridged under the chassis with modern caps. NO other
> mods/repair noted during my inspection. The T-4X manual is a reprint, and
> the R-4 manual although original has an earlier s/n on the cover, so didn't
> come with this rig. Schematic is of the right vintage in the case of the
> R-4, not sure of the reprint.
>
> For pricing, I would consider about what WB4HFN shows on his resale charts

> as "average", $425 picked up in Southwestern Oklahoma. If you insist on
> shipping it, it would have to ship in 4 boxes, and I could take it to a
> private shipper I have used as he packs well. All packing/shipping is your
> responsibility. I would get pricing first, as it will not be cheap, but it
> will arrive well packed and not damaged any further.
>
> If no interest on the list at that price, I'll advertise elsewhere or refurb
> it and build another shelf, HI. I am being honest as I can, and have a
> NUMBER of pictures I would share with a serious buyer. This is one of the
> nicest sets I have seen in many years of fooling with these old Drakes, so
> if you want a nice example of this vintage rig, let me know. I found in
> some other stuff I bought from that estate an 8" x 10" color shot of this
> station in Jim's shack years ago.
>
> BTW, I did share the s/n data with WB4HFN.
> 73,
> Don, WB5HAK
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3267 / Virus Database: 3161/6220 - Release Date: 04/02/13
>

12998. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 15:03:34 UTC
From: Garey Barrell
Topic: 12900 Message: 12998

Claude -

A weak tube is a problem. The three are in parallel, and are run pretty well 'at their limit'. So if one is weak, theother two are driven PAST their 'limit' and distortion (spurious and harmonic) increase dramatically.

Drake sold 'matched' sets of tubes for about $9, but no more! :-) Tubes are matched not by 'gain', rather by current sharing. 'Matching' is done by setting one tube to 35 mA of idle current, then plugging in a second tube and without changing the BIAS voltage measure the idle current for THAT tube. I've never been able to locate an exact specification, but I believe their matched sets were within 5% of each other. Tubes in the transmitters are run at 35 mA each (70 mA total idle current), and in the transceivers at 33.3mA, but I think that's just a matter of meter markings. I aim for within 5% of absolute current, but more importantly within 5% of each other. The transmitter/transceiver meters are NOT accurate enough to make these measurements. Drake paid less than $1 for them, so they are 'indicators' at best. I always calibrate the meter shunt to read as accurately as possible atthe BIAS current, as that is the one current that is most important in the operation of the radio.

Similarly, allthree should be of the same brand, preferably Sylvania, Zenith, RCA or GE. Those four brands have all proven towork reliably. Drake shipped with all three at one time or another, (Zenith = Sylvania). Other brands 'may' work, but not consistently, some do, some don't. Keep in mind that these tubes were designed to operate at 15 kHz and we're using them up to 30 MHz. Sylvania was the only company to actually characterize these tubes and publish the data for RF use. Mechanical variations in assembly not important at 15 kHz may be VERY important at 30 MHz. There have been reports of tubes, even from the preferred manufacturers, that are too tall to fit in the PA. I'm not sure of the source(s) because the outliers are considerably out of the tolerance specified for 'seated height', which is unlikely due to the highly automated manufacturing processes involved. I don't know if they were 'rebranded' tubes, or what!?!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> I ordered new tubes and they are on their way. I just wanted to know if that can be the cause and I'll put the Drake TR-4 aside until I got new tubes, a new crystal and a new neon light. By the way I ordered a box of 10 Sylvania NE2-E, if someone need one, I can send it...
>
> 73's
>
> Claude
> LXEX
>
>
> ----- Original Message -----
> From: "claudewelsch" <clwelsch@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 05, 2013 2:21 PM
> Subject: [DrakeRadio] Re: No good output with my new (old)
> TR-4
>
>
>>> Ok, I checked everything and it was tight. Can it be that
>>> a bad tube out of the three can cause oscillations? I
>>> tested the tubes in the T-4X and number 2 was definitely
>>> much weaker than number 1 and number 3.
>>>
>>> 73's
>>>
>>> Claude
>>> LX1EX
>>

12999. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 15:11:30 UTC
From: claudewelsch
Topic: 12900 Message: 12999

Hello Garey,

Thank you very much for the detailed explanation about the tubes!

How can I easily measure the bias current or equivalent voltage?
I read somewhere something about a test point that has a proportional voltage, but I didn't find that test point...

73's

Claude
LX1EX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Claude -
>
> A weak tube is a problem. The three are in parallel, and are run
> pretty well 'at their limit'. So if one is weak, theother two are
> driven PAST their 'limit' and distortion (spurious and harmonic)
> increase dramatically.
>
> Drake sold 'matched' sets of tubes for about $9, but no more! :-)
> Tubes are matched not by 'gain', rather by current sharing.
> 'Matching' is done by setting one tube to 35 mA of idle current, then
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> locate an exact specification, but I believe their matched sets were
> within 5% of each other. Tubes in the transmitters are run at 35 mA
> each (70 mA total idle current), and in the transceivers at 33.3mA,
> but I think that's just a matter of meter markings. I aim for within
> 5% of absolute current, but more importantly within 5% of each other.
> The transmitter/transceiver meters are NOT accurate enough to make
> these measurements. Drake paid less than $1 for them, so they are
> 'indicators' at best. I always calibrate the meter shunt to read as
> accurately as possible atthe BIAS current, as that is the one current
> that is most important in the operation of the radio.
>
> Similarly, allthree should be of the same brand, preferably Sylvania,
> Zenith, RCA or GE. Those four brands have all proven towork
> reliably. Drake shipped with all three at one time or another,
> (Zenith = Sylvania). Other brands 'may' work, but not consistently,
> some do, some don't. Keep in mind that these tubes were designed to
> operate at 15 kHz and we're using them up to 30 MHz. Sylvania was the
> only company to actually characterize these tubes and publish the data
> for RF use. Mechanical variations in assembly not important at 15 kHz

> may be VERY important at 30 MHz. There have been reports of tubes,
> even from the preferred manufacturers, that are too tall to fit in the
> PA. I'm not sure of the source(s) because the outliers are
> considerably out of the tolerance specified for 'seated height', which
> is unlikely due to the highly automated manufacturing processes
> involved. I don't know if they were 'rebranded' tubes, or what!?!
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> claudewelsch wrote:
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> >
> > 73's
> >
> > Claude
> > LXEX
> >
> >
> > ----- Original Message -----
> > From: "claudewelsch" <clwelsch@>
> > To: <DrakeRadio@...m>
> > Sent: Friday, April 05, 2013 2:21 PM
> > Subject: [DrakeRadio] Re: No good output with my new (old)
> > TR-4
> >
> >
> > >>> Ok, I checked everything and it was tight. Can it be that
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> > >>> tested the tubes in the T-4X and number 2 was definitely
> > >>> much weaker than number 1 and number 3.
> > >>>
> > >>> 73's
> > >>>
> > >>> Claude
> > >>> LX1EX
> > >>
> >

13000. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 15:21:53 UTC
From: Garey Barrell
Topic: 12900 Message: 13000

That test point was only on the AC-3 power supply. It was a wirewound resistor between the HV supply and chassis ground. It only read ~ 0.5V at idle, so wasn'tall that accurate with the VTVMs of the day. With today's DMMs, it would be useful!

Drake had a test panel with 'real' meters between the power supply and the radio. I have a good meter in a box with Jones connectors on each end that does the same thing. It's in series with the HV lead. This ignores the Screen current, but that's only a couple of mA and I just mentally allow for it. Again the 'relative current' is more critical than the 'absolute current' here, within reason.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

claudewelsch wrote:
> Hello Garey,
>
> Thank you very much for the detailed explanation about the tubes!
>
> How can I easily measure the bias current or equivalent voltage?
> I read somewhere something about a test point that has a proportional voltage, but I didn't find that test point...
>
> 73's
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Claude -
>>
>> A weak tube is a problem. The three are in parallel, and are run
>> pretty well 'at their limit'. So if one is weak, theother two are
>> driven PAST their 'limit' and distortion (spurious and harmonic)
>> increase dramatically.
>>
>> Drake sold 'matched' sets of tubes for about $9, but no more! :-)
>> Tubes are matched not by 'gain', rather by current sharing.
>> 'Matching' is done by setting one tube to 35 mA of idle current, then
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>> measure the idle current for THAT tube. I've never been able to

>> locate an exact specification, but I believe their matched sets were
>> within 5% of each other. Tubes in the transmitters are run at 35 mA
>> each (70 mA total idle current), and in the transceivers at 33.3mA,
>> but I think that's just a matter of meter markings. I aim for within
>> 5% of absolute current, but more importantly within 5% of each other.
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>> these measurements. Drake paid less than $1 for them, so they are
>> 'indicators' at best. I always calibrate the meter shunt to read as
>> accurately as possible atthe BIAS current, as that is the one current
>> that is most important in the operation of the radio.
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>> Similarly, allthree should be of the same brand, preferably Sylvania,
>> Zenith, RCA or GE. Those four brands have all proven towork
>> reliably. Drake shipped with all three at one time or another,
>> (Zenith = Sylvania). Other brands 'may' work, but not consistently,
>> some do, some don't. Keep in mind that these tubes were designed to
>> operate at 15 kHz and we're using them up to 30 MHz. Sylvania was the
>> only company to actually characterize these tubes and publish the data
>> for RF use. Mechanical variations in assembly not important at 15 kHz
>> may be VERY important at 30 MHz. There have been reports of tubes,
>> even from the preferred manufacturers, that are too tall to fit in the
>> PA. I'm not sure of the source(s) because the outliers are
>> considerably out of the tolerance specified for 'seated height', which
>> is unlikely due to the highly automated manufacturing processes
>> involved. I don't know if they were 'rebranded' tubes, or what!?!
>>
>> 73, Garey - K4OAH
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>> claudewelsch wrote:
>>> I ordered new tubes and they are on their way. I just wanted to know if that can be the cause and I'll put the Drake TR-4 aside until I got new tubes, a new crystal and a new neon light. By the way I ordered a box of 10 Sylvania NE2-E, if someone need one, I can send it...
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>>> 73's
>>>
>>> Claude
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>>>
>>>
>>> ----- Original Message -----
>>> From: "claudewelsch" <clwelsch@>
>>> To: <DrakeRadio@yahoogroups.com>
>>> Sent: Friday, April 05, 2013 2:21 PM
>>> Subject: [DrakeRadio] Re: No good output with my new (old)

>>> TR-4
>>>
>>>
>>>>> Ok, I checked everything and it was tight. Can it be that
>>>>> a bad tube out of the three can cause oscillations? I
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>>>>>
>>>>> 73's
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>>>>> Claude
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>
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> Yahoo! Groups Links
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13001. Re: [DrakeRadio] Re: R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 15:27:59 UTC
From: Don Cunningham
Topic: 12948 Message: 13001

Claude,

I was just telling Garey in an email last night that I was really glad that no one had become interested in the pair. As I dig deeper into the R-4, it has much more serious problems than had originally been seen. Shipping/moving is hard on the gear, and this one has been "repaired" after the moving damage. I'm not sure the repairer saw all that needed doing. It may well end up being a parts donor.

Besides, shipping to France I would think more than the worth of the rigs.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6228 - Release Date: 04/06/13

[Non-text portions of this message have been removed]

13002. Re: R-4 and T4X Station

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 15:39:29 UTC
From: claudewelsch
Topic: 12948 Message: 13002

Yes, Don, I emailed you some days ago, just after your message that nobody was interested, but today your message came back as undeliverable. That's why my late reaction.
And yes, shipping has become very complicated. I am using a freight forwarder and I am doing batch jobs, this brings the cost a bit down.

But if the receiver isn't working well, it's no use because the one I've got now really pleases me a lot, even if it is not an absolute beauty.

73's

Claude

LX1EX

--- In DrakeRadio@yahoogroups.com, "Don Cunningham" <donc@...> wrote:
>
> Claude,
>
> I was just telling Garey in an email last night that I was really glad that no one had become interested in the pair. As I dig deeper into the R-4, it has much more serious problems than had originally been seen. Shipping/moving is hard on the gear, and this one has been "repaired" after the moving damage. I'm not sure the repairer saw all that needed doing. It may well end up being a parts donor.
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> Besides, shipping to France I would think more than the worth of the rigs.
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>
> -----
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> Version: 2013.0.3272 / Virus Database: 3162/6228 - Release Date: 04/06/13
>
>
> [Non-text portions of this message have been removed]
>

13003. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 16:55:28 UTC
From: Al Parker
Topic: 12900 Message: 13003

Hi folks,
Garey knows this as well, if you have the rig open, you can easily measure the plate (incl. screen) current of each final by measuring the voltage across each cathode resistor. First measure the value of each resistor, and if they are more than 5% different replace them with matching ones. Use ohms law to calculate the currents.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 4/6/2013 11:21 AM, Garey Barrell wrote:
> That test point was only on the AC-3 power supply. It was a wirewound
> resistor between the HV supply and chassis ground. It only read ~
> 0.5V at idle, so wasn'tall that accurate with the VTVMs of the day.
> With today's DMMs, it would be useful!
>
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> claudewelsch wrote:
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> >
> > Thank you very much for the detailed explanation about the tubes!
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> > How can I easily measure the bias current or equivalent voltage?
> > I read somewhere something about a test point that has a proportional
> voltage, but I didn't find that test point...
> >
> > 73's

> >
> > Claude
> > LX1EX
> >
> > --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com>, Garey Barrell <k4oah@...> wrote:
> >> Claude -
> >>
> >> A weak tube is a problem. The three are in parallel, and are run
> >> pretty well 'at their limit'. So if one is weak, theother two are
> >> driven PAST their 'limit' and distortion (spurious and harmonic)
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> >> Tubes are matched not by 'gain', rather by current sharing.
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> >> within 5% of each other. Tubes in the transmitters are run at 35 mA
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> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>

> >>
> >> claudewelsch wrote:
> >>> I ordered new tubes and they are on their way. I just wanted to
> know if that can be the cause and I'll put the Drake TR-4 aside until I
> got new tubes, a new crystal and a new neon light. By the way I ordered
> a box of 10 Sylvania NE2-E, if someone need one, I can send it...
> >>>
> >>> 73's
> >>>
> >>> Claude
> >>> LXEX
> >>>
> >>>
> >>> ----- Original Message -----
> >>> From: "claudewelsch" <clwelsch@>
> >>> To: <DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>>
> >>> Sent: Friday, April 05, 2013 2:21 PM
> >>> Subject: [DrakeRadio] Re: No good output with my new (old)
> >>> TR-4
> >>>
> >>>
> >>>>> Ok, I checked everything and it was tight. Can it be that
> >>>>> a bad tube out of the three can cause oscillations? I
> >>>>> tested the tubes in the T-4X and number 2 was definitely
> >>>>> much weaker than number 1 and number 3.
> >>>>>
> >>>>> 73's
> >>>>>
> >>>>> Claude
> >>>>> LX1EX
> >
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> > Yahoo! Groups Links
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13004. (no subject)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 17:31:10 UTC
From: JT
Topic: 13004 Message: 13004

Hi all,

Recently got my first Drake which is a SPR-4 from a second hand shop.

The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.

I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.

But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.

Could someone please explain the working of this circuit.

Thanks,

[Non-text portions of this message have been removed]

13005. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 18:45:48 UTC
From: Howard Traxler
Topic: 12538 Message: 13005

Thanks Gary.
Finally got the XYL down there to help get the bias set correctly.

Now, I'd like to put the final cage back on before I have a problem. That's gonna be tuff because one of those screws goes where my fingers won't fit. Maybe another job for the XYL. But, before I put the cage back, I'd like to clean the dust and crud off the finals. XYL suggests we keep track of the numbers, etc., and write them back on with a marking pencil. What does anybody think?

Gary, you mentioned to check signal at v4 and v6. Wonder ifyou can describe how to find those tubes--with my eyes shut.

Thanks,
Howard
v
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, March 30, 2013 10:57 AM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

First, the BIAS should be set for 0.1A, not 1.5A! The idle current
should be set to 0.1A.

Listening on a separate receiver, can you HEAR a signal on 40M when
you key the transmitter, even a very weak one.

Using your external receiver with a little sample loop for an antenna,
put the loop near V4 and see if you can hear a 7.000 MHz signal with
the PTO of the TR-4 set to 000. This would be in TUNE mode, -x on the
SIDEBAND switch. If you can, see if it's stronger at V6. Keep an eye
on the PLATE meter to make sure the plate current doesn't jump up
during this test.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Thanks Garey, for the encouragement. I did take off the final cage (4 screws and 2 shafts) and the protection lamp shows close to 0 ohms. I think that means it's OK. I'd sure like to clean the dust off of those finals. It must be 1/16" thick and sure smells when

they start to get warm.
>
> Yes, (Got the XYL to take a look) when I key the PTT I was getting 100ma (I think that's what the 1 on the meter indicates). I set the bias down a bit so I'm now getting abut 150. I think that's what the mark between the 1 and 2 is for.
>
> Seems like I must be losing signal at an RF or mixer stage. What can I check next.
>
> Thank you very much for your suggestions. I sure hope I can get this one working without sending it away.
>
> Thanks and 73,
> de
> Howard, WA9RYF
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, March 24, 2013 10:32 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Howard -
>
> OK.
>
> The 9.00 MHz is good, and 'should' be heard on all bands. That is the
> Carrier Oscillator. When you switch to CW or AM, it is 'moved' about
> 1 kHz lower in frequency.
>
> The 21.5 MHz is good, and 'should' be heard only on 40M. That is the
> Heterodyne Oscillator. It will be different for each band.
>
> When the PTO is tuned to the '000' point, it should be heard at 5
> MHz. This is a tunable oscillator, and so may be a few kHz, (up to
> 10,) either side of this frequency.
>
> The final cage isn't that hard to remove, the TUNE and LOAD shafts
> just pull out of the couplers that go through the side, and then
> remove the small screws. Obviously power off and power supply unplugged.
>
> You didn't answer whether you had PA Bias current when you closed the
> PTTas described in Section 4, para A in the manual.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

> Howard Traxler wrote:
> > Hi Garey and thanks. Finally got to check out the local oscilators.
> >
> > Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> > Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
> >
> > Garey: the crystal oscillator runs at 21.5 MHz.
> > Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
> >
> > I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
> >
> > Further suggestions, please? Thank you.
> >
> > Howard, WA9RYF
> >
> >
> >
> >
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wednesday, March 13, 2013 11:53 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> > the crystal oscillator runs at 21.5 MHz.
> >
> > Yes, only PA tubes inside the cage.
> >
> > Don't remove tubes from sockets, just rock them back and forth a little one at a time.
> >
> > Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Howard Traxler wrote:
> > > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and

forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> > >
> > > Are the three finals the only tubes in the final cage?
> > >
> > > It's hard to physically check all the tubes. There are so many I get confused.
> > >
> > > Would that protection bulb be inside the cage with the finals?
> > >
> > > What frequency can I listen to to hear local oscilators from the receiver?
> > >
> > > These answers will give me something to do a while. Thanks to you and Don.
> > >
> > > 73, WA9RYF
> > > ----- Original Message -----
> > > From: Garey Barrell
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Wednesday, March 13, 2013 9:57 AM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >
> > >
> > >
> > > Howard -
> > >
> > > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > > #47 bulb, just with a bi-pin base.
> > >
> > > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> > > problem if that is the cause.
> > >
> > > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > > rigs with ALL connected to their own antenna, the bulb isn't necessary.
> > >
> > > I assume it wasn't the slide switch on the side.?
> > >
> > > Do you have PA idle current when PTT is closed?
> > >
> > > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> > > times. Not the PA tubes.
> > >
>

[Non-text portions of this message have been removed]

13006. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 19:30:30 UTC
From: Garey Barrell
Topic: 12538 Message: 13006

Howard -

You really need a CD... :-) Pulling the finals is no big deal. Just becareful when you remove the top cap and swing them carefully out of the way. Inspect the solder connections to the RF Choke 'post' that they all connect to to make sure they don't crack when you finish and have the caps back on the tubes. All three tubes are the same, so it doesn't matter which order they are in. Remember the power is off and the Power Supply is disconnected.

There are four tubesin a rectangle just in front of the PA cage, along the side of the chassis. Looking down from the top, with the front panel 'to' you, V6 is the top right tube of the group, and V4 is the lower left tube. V4 is the Mixer and V6 is the Driver for the PA.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Thanks Gary.
> Finally got the XYL down there to help get the bias set correctly.
>
> Now, I'd like to put the final cage back on before I have a problem. That's gonna be tuff because one of those screws goes where my fingers won't fit. Maybe another job for the XYL. But, before I put the cage back, I'd like to clean the dust and crud off the finals. XYL suggests we keep track of the numbers, etc., and write them back on with a marking pencil. What does anybody think?
>
> Gary, you mentioned to check signal at v4 and v6. Wonder ifyou can describe how to find those tubes--with my eyes shut.
>
>
> Thanks,
> Howard
> v
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, March 30, 2013 10:57 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>

>
> Howard -
>
> First, the BIAS should be set for 0.1A, not 1.5A! The idle current
> should be set to 0.1A.
>
> Listening on a separate receiver, can you HEAR a signal on 40M when
> you key the transmitter, even a very weak one.
>
> Using your external receiver with a little sample loop for an antenna,
> put the loop near V4 and see if you can hear a 7.000 MHz signal with
> the PTO of the TR-4 set to 000. This would be in TUNE mode, -x on the
> SIDEBAND switch. If you can, see if it's stronger at V6. Keep an eye
> on the PLATE meter to make sure the plate current doesn't jump up
> during this test.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Howard Traxler wrote:
> > Thanks Garey, for the encouragement. I did take off the final cage (4 screws and 2 shafts) and the protection lamp shows close to 0 ohms. I think that means it's OK. I'd sure like to clean the dust off of those finals. It must be 1/16" thick and sure smells when they start to get warm.
> >
> > Yes, (Got the XYL to take a look) when I key the PTT I was getting 100ma (I think that's what the 1 on the meter indicates). I set the bias down a bit so I'm now getting abut 150. I think that's what the mark between the 1 and 2 is for.
> >
> > Seems like I must be losing signal at an RF or mixer stage. What can I check next.
> >
> > Thank you very much for your suggestions. I sure hope I can get this one working without sending it away.
> >
> > Thanks and 73,
> > de
> > Howard, WA9RYF
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Sunday, March 24, 2013 10:32 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > Howard -

> >
> > OK.
> >
> > The 9.00 MHz is good, and 'should' be heard on all bands. That is the
> > Carrier Oscillator. When you switch to CW or AM, it is 'moved' about
> > 1 kHz lower in frequency.
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> > 10,) either side of this frequency.
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> > The final cage isn't that hard to remove, the TUNE and LOAD shafts
> > just pull out of the couplers that go through the side, and then
> > remove the small screws. Obviously power off and power supply unplugged.
> >
> > You didn't answer whether you had PA Bias current when you closed the
> > PTTas described in Section 4, para A in the manual.
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> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >
> > Howard Traxler wrote:
> > > Hi Garey and thanks. Finally got to check out the local oscilators.
> > >
> > > Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> > > Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
> > >
> > > Garey: the crystal oscillator runs at 21.5 MHz.
> > > Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
> > >
> > > I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
> > >
> > > Further suggestions, please? Thank you.
> > >
> > > Howard, WA9RYF
> > >
> > >
> > >

> > >
> > > ----- Original Message -----
> > > From: Garey Barrell
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Wednesday, March 13, 2013 11:53 AM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >
> > >
> > >
> > > On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
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> > > Yes, only PA tubes inside the cage.
> > >
> > > Don't remove tubes from sockets, just rock them back and forth a little one at a time.
> > >
> > > Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
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> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > Howard Traxler wrote:
> > > > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> > > >
> > > > Are the three finals the only tubes in the final cage?
> > > >
> > > > It's hard to physically check all the tubes. There are so many I get confused.
> > > >
> > > > Would that protection bulb be inside the cage with the finals?
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> > > > What frequency can I listen to to hear local oscilators from the receiver?
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> > > > These answers will give me something to do a while. Thanks to you and Don.
> > > >
> > > > 73, WA9RYF
> > > > ----- Original Message -----
> > > > From: Garey Barrell
> > > > To: DrakeRadio@yahoogroups.com
> > > > Sent: Wednesday, March 13, 2013 9:57 AM
> > > > Subject: Re: [DrakeRadio] My non-working TR-4
> > > >

> > > >
> > > >
> > > > Howard -
> > > >
> > > > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > > > #47 bulb, just with a bi-pin base.
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> > > > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
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> > > > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > > > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > > > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > > > rigs with ALL connected to their own antenna, the bulb isn't necessary.
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> > > > I assume it wasn't the slide switch on the side.?
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> > > > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13007. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 19:35:57 UTC
From: Garey Barrell
Topic: 13004 Message: 13007

JT -

That lead is NOT connected where it crosses the Emitter lead of Q19.
That's why it doesn't make sense! :-)

Back in the olde days, wires crossing like that would have a "U" shape
to show the crossover, but that was too much trouble to draw, so they
started putting a big 'DOT' where it was a connection (like the one
just below the one in question). This was 'ok' for the original
drawing, but by the time it's photocopied a couple of (dozen) times
the crossover isn't all that clear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

JT wrote:
> Hi all,
>
> Recently got my first Drake which is a SPR-4 from a second hand shop.
>
> The audio board is burnt out and the 12V regulator board looks badly repaired.The
regulator transistor looks like a replacement,hanging in the air.
>
> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks
fairly straightforward.
>
> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and
R82 to S14R and CR10.
>
> Could someone please explain the working of this circuit.
>
> Thanks,
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13008. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 19:55:04 UTC
From: Paul Christensen
Topic: 13008 Message: 13008

Another method eliminates the use of the line loop and dot. Instead, where two connected lines need to cross on the schematic, the crossing line is staggered into a "T." That way, nothing special is required and the connection clearly shows up on photocopies.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, April 06, 2013 3:35 PM
Subject: Re: [DrakeRadio]

JT -

That lead is NOT connected where it crosses the Emitter lead of Q19.
That's why it doesn't make sense! :-)

Back in the olde days, wires crossing like that would have a "U" shape
to show the crossover, but that was too much trouble to draw, so they
started putting a big 'DOT' where it was a connection (like the one
just below the one in question). This was 'ok' for the original
drawing, but by the time it's photocopied a couple of (dozen) times
the crossover isn't all that clear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

[Non-text portions of this message have been removed]

13009. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 19:58:30 UTC
From: HUTaner
Topic: 13004 Message: 13009

Thank you -))

I was pulling my hair out to see whether there were using a combined carrier as well as audio derived alc/agc.

Thanks again,

>_____
> From: Garey Barrell <k4oah@mindspring.com>
>To: DrakeRadio@yahoogroups.com
>Sent: Saturday, 6 April 2013, 20:35
>Subject: Re: [DrakeRadio]
>
>
>
>JT -
>
>That lead is NOT connected where it crosses the Emitter lead of Q19.
>That's why it doesn't make sense! :-)
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>73, Garey - K4OAH
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>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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><www.k4oah.com>
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>JT wrote:
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>>
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>>
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>>
>> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
>>
>> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and

R82 to S14R and CR10.
>>
>> Could someone please explain the working of this circuit.
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>> Thanks,
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>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13010. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 20:08:32 UTC
From: taner@btinternet.com
Topic: 13004 Message: 13010

Thank you -))

I was pulling my hair out to see whether there were using a combined carrier as well as audio derived alc/agc.

Thanks again,

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> JT -
>
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> That's why it doesn't make sense! :-)
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >
> >
> >
> > [Non-text portions of this message have been removed]
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> > Yahoo! Groups Links
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13011. Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 20:22:45 UTC
From: John Sehring
Topic: 13011 Message: 13011

Easy way to determine "goodness" of tubes in Drake finals, both for T-4* and TR-* radios.

With tx keyed, at moderate plate current, measure voltage at top of cathode resistors of finals vs. chassis ground.

Can repeat with full rated CW plate current but make it quick--these are sweep tubes!

This voltage is proportional to plate current. Look for reasonable balance of voltages from each tube.

To get more accurate, measure resistance of each cathode resistor WITH NO power applied to transmitter. It's likely drifted some.

Then Ohm's law I = E/R will give you current.

I prefer to use a high quality (e.g. Fluke) DMM for this due to RF being present, can throw some DMM's way off.

Best method is to use ye olde fashion VOM like a Simpson 260--totally passive, quite RF proof.

--John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada

[Non-text portions of this message have been removed]

13012. Re: [DrakeRadio] Re: No good output with my new (old) TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 20:53:24 UTC
From: Garey Barrell
Topic: 13011 Message: 13012

Hi John -

Welcome!

One caveat for this method. The resistors really need to be measured, since many are up to 17 - 19 ohms. The absolute value isn't as critical as the relative values, since this determines the 'balance' of the PA tubes. Don't forget that you are measuring very low resistances, and don't forget the resistance of the test leads where appropriate. They can easily be anohm or two on their own.

My goalis to have the resistors within +/- 15 Ohms _AND_ +/- 5% of each other. Overkill perhaps, but not all that hard to accomplish and just one less source of distortion to worry about.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
> Easy way to determine "goodness" of tubes in Drake finals, both for T-4* and TR-* radios.
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> Then Ohm's law I = E/R will give you current.
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>
> Best method is to use ye olde fashion VOM like a Simpson 260--totally passive, quite RF proof.
>
> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
>

>

13013. low output on t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-06 23:57:58 UTC
From: yash@aol.com
Topic: 13013 Message: 13013

Just finished going thru my t4x and have a rig that will tune up to about 70 watts max, on the meter. Its the same for 80 to 20 and a bit less on 10. I was told this when I bought the rig. I have a new pair of finals I will put in sunday. A quidk check shows all voltages and bias correct. Is there anything else that will cause lower output, besides final tubes,normally? Just curious. also have a new driver.
thanks
dale wt4t

[Non-text portions of this message have been removed]

13014. Re: [DrakeRadio] low output on t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 00:22:40 UTC
From: Al Parker
Topic: 13013 Message: 13014

By "70 watts max, on the meter" do you mean the plate meter, or an external known watt meter? There have been 2 posts today about measuring true plate current, if you're relying on the T4-X's meter, maybe you should check it out.
You might also check the plate dropping resistor for the driver, as well as the cathode and screen resistors for the finals.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much worth doing as simply messing about in boats"
Ratty, to Mole

On 4/6/2013 7:57 PM, yash@... wrote:
> Just finished going thru my t4x and have a rig that will tune up to
> about 70 watts max, on the meter. Its the same for 80 to 20 and a bit
> less on 10. I was told this when I bought the rig. I have a new pair of
> finals I will put in sunday. A quidk check shows all voltages and bias
> correct. Is there anything else that will cause lower output, besides
> final tubes,normally? Just curious. also have a new driver.
> thanks
> dale wt4t
>
> [Non-text portions of this message have been removed]
>
>

13015. Re: [DrakeRadio] low output on t4x

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 01:01:10 UTC
From: Garey Barrell
Topic: 13013 Message: 13015

Dale -

Check R26, R24 & R23.

You sure both PA tubes are lit ?!?!?

~0.5 VDC across both 15 ohm resistors at idle??

73, Garey - K4OAH
Glen Allen, VA
Drake Service Supplement CDs for
2-B, 2-C/NT, A, B and C-Line,
TR-4 and TR-4C

yash@... wrote:
> Just finished going thru my t4x and have a rig that will tune up to about 70 watts max, on the meter. Its the same for 80 to 20 and a bit less on 10. I was told this when I bought the rig. I have a new pair of finals I will put in sunday. A quidk check shows all voltages and bias correct. Is there anything else that will cause lower output, besides final tubes,normally? Just curious. also have a new driver.
> thanks
> dale wt4t
>

13016. The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 21:12:45 UTC
From: qrper
Topic: 13016 Message: 13016

Well gang,

I've been working on this reciter for a while and not making much progress.

It just didn't seem to want to settle down and play nice with others.

The output would move and drop and hen go back up and drop. Sometimes there would be nothing out and then it' start amplifying its own carrier frequency.

I fixed it.

It seems to me that the problem may have been from the factory as I can't figure out how the fault happened. And the fault?

On the band switch, the second wafer from the front panel, on the 40 meter position the finger (tab) of the wafer didn't go through the fingers. It went under them. The fingers weren't broke, they weren't damaged, they just didn't make contact with the tab. Now, sometimes they would and most of the time they didn't.

The bandswitch main shaft didn't allow the wafer to move and it didn't just fall out. So, I had to remove the bandswitch shaft, wiggle the wafer into the fingers and reinstall everything.

100+ watts on every band now and it's on the right bands. No more 5.649 or 11.xxx freq.

Just wanted to let the group know.

mike, wb8vge

13017. Re: [DrakeRadio] The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 21:24:34 UTC
From: Garey Barrell
Topic: 13016 Message: 13017

Mike -

Well that's a new one!! :-) Good catch...

That's the BAND crystal selector wafer, so that'swhy the IF output IF
you tune the RF TUNE to 5.645 MHz, it means there's no PreMixer signal
reaching the 2nd Mixer, which means either the BAND OSC or PTO is
probably not running.

Nothing worse than a 'sometimes' problem!! Thanks for reporting back.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrper wrote:
> Well gang,
>
> I've been working on this reciter for a while and not making much progress.
>
> It just didn't seem to want to settle down and play nice with others.
>
> The output would move and drop and hen go back up and drop. Sometimes there would be nothing out and then it' start amplifying its own carrier frequency.
>
> I fixed it.
>
> It seems to me that the problem may have been from the factory as I can't figure out how the fault happened. And the fault?
>
> On the band switch, the second wafer from the front panel, on the 40 meter position the finger (tab) of the wafer didn't go through the fingers. It went under them. The fingers weren't broke, they weren't damaged, they just didn't make contact with the tab. Now, sometimes they would and most of the time they didn't.
>
> The bandswitch main shaft didn't allow the wafer to move and it didn't just fall out. So, I had to remove the bandswitch shaft, wiggle the wafer into the fingers and reinstall everything.
>
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>
> Just wanted to let the group know.
>

> mike, wb8vge
>
>
>

13018. Re: [DrakeRadio] The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 21:37:41 UTC
From: Mike Bryce
Topic: 13016 Message: 13018

You're right! There is nothing more upsetting than having a problem that keeps changing.

It took a while to fine, good thing I pay myself by the hour.

It wasn't until I flipped the radio over at a different angle and with a bright LED flashlight did I see the tab completely missing the two fingers.

Grrrr....

mike, wb8vge

On Sun, Apr 7, 2013 at 5:24 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> Mike -
>
> Well that's a new one!! :-) Good catch...
>
> That's the BAND crystal selector wafer, so that'swhy the IF output IF
> you tune the RF TUNE to 5.645 MHz, it means there's no PreMixer signal
> reaching the 2nd Mixer, which means either the BAND OSC or PTO is
> probably not running.
>
> Nothing worse than a 'sometimes' problem!! Thanks for reporting back.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>
> qrper wrote:
> > Well gang,
> >
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> progress.
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> >
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> there would be nothing out and then it' start amplifying its own carrier

> frequency.
> >
> > I fixed it.
> >
> > It seems to me that the problem may have been from the factory as I
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> just didn't make contact with the tab. Now, sometimes they would and most
> of the time they didn't.
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> > The bandswitch main shaft didn't allow the wafer to move and it didn't
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> into the fingers and reinstall everything.
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> or 11.xxx freq.
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> > Just wanted to let the group know.
> >
> > mike, wb8vge
> >
> >
> >
>
>
>

--
Mike, WB8VGE
SunLight Energy Systems
The Heathkit Shop
http://www.theheathkitshop.com/

J e e p
o|||||||o

[Non-text portions of this message have been removed]

13019. Re: [DrakeRadio] The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 22:02:35 UTC
From: Kris Merschrod
Topic: 13016 Message: 13019

Mike - your ruined it - you almost had the first Drake on 60 Mtrs! That would have had the community really excited.

As Garey said - "good catch."

Kris KM2KM
----- Original Message -----
From: qrper
To: DrakeRadio@yahoogroups.com
Sent: Sunday, April 07, 2013 5:12 PM
Subject: [DrakeRadio] The Drake T-4 reciter from hell

Well gang,

I've been working on this reciter for a while and not making much progress.

It just didn't seem to want to settle down and play nice with others.

The output would move and drop and hen go back up and drop. Sometimes there would be nothing out and then it' start amplifying its own carrier frequency.

I fixed it.

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100+ watts on every band now and it's on the right bands. No more 5.649 or 11.xxx freq.

Just wanted to let the group know.

mike, wb8vge

[Non-text portions of this message have been removed]

13020. Re: [DrakeRadio] The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 23:38:35 UTC
From: Steve Wedge
Topic: 13016 Message: 13020

Nice catch, Mike!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: qrper
Sent: Sunday, April 07, 2013 5:12 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] The Drake T-4 reciter from hell

Well gang,

I've been working on this reciter for a while and not making much progress.

It just didn't seem to want to settle down and play nice with others.

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Just wanted to let the group know.

mike, wb8vge

[Non-text portions of this message have been removed]

13021. Re: [DrakeRadio] The Drake T-4 reciter from hell

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-07 23:42:24 UTC
From: Jim Shorney
Topic: 13016 Message: 13021

On Sun, 07 Apr 2013 21:12:45 -0000, qrper wrote:

>It seems to me that the problem may have been from the factory as I can't figure out how the fault happened.

Having been in both worlds, I know that there tends to be a different subset of problems that you look for in production troubleshooting than what you look for in repair of something that was (presumably) once working correctly. It takes a bit of re-training in your way of thinking when going from one paradigm to the other. Problems that don't belong are often the hardest to find.

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13022. Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 01:57:30 UTC
From: Garey Barrell
Topic: 13022 Message: 13022

A 'discussion' has been going on over on that 'other' reflector (The "C" word) regarding the 'proper' procedure for replacing a component in one of our babies.

Several are touting the little Sprague coils (I forget the name, 'quigs?') that aretinned andfluxed. You cut the old component out, slip the 'coil' over the cutoff lead and poke the 'new' part lead intothe other end of the 'coil' andheat. Of course, most use a soldering ironbut I believe I recall back when they were being included in each package of caps from Sprague, that the instructions said it was as simple as heating it with a match or lighter!!. The idea is that you don't have to clean out a terminal strip and unwrap a wire to get the old one out. This led into solder removal techniques, Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The Hakko will clean solder out/off of anything smaller than abicycle frame, making it simple to merely unwrap the wire with a soldering aid tool. (Pointy end / bifurcated end.)

Drake had a 'better idea', just an eyelet filled with solder in a board, heat the eyelet, pull out the old lead and poke in a new one! :-)

Eventually it got into the 'Art wouldn't have approved' discussion (you DO know that each sealed PTO has air in it that was breathed by Art don't you)?

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13023. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:05:05 UTC
From: Steve Wedge
Topic: 13022 Message: 13023

That's what happens when the sets become "too" valuable.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Apr 7, 2013, at 9:57 PM, Garey Barrell <k4oah@...> wrote:

>
> A 'discussion' has been going on over on that 'other' reflector (The
> "C" word) regarding the 'proper' procedure for replacing a component
> in one of our babies.
>
> Several are touting the little Sprague coils (I forget the name,
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> soldering ironbut I believe I recall back when they were being
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> wire to get the old one out. This led into solder removal techniques,
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> Hakko will clean solder out/off of anything smaller than abicycle
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> tool. (Pointy end / bifurcated end.)
>
> Drake had a 'better idea', just an eyelet filled with solder in a
> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
>
> Eventually it got into the 'Art wouldn't have approved' discussion
> (you DO know that each sealed PTO has air in it that was breathed by
> Art don't you)?
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> --
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>

[Non-text portions of this message have been removed]

13024. PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:19:56 UTC
From: Garey Barrell
Topic: 13024 Message: 13024

I was sitting at my desk yesterday afternoonwith the 7-Line on 40M CW with the gain turned down, just to have some background music. Suddenly, I noticed that there was a 'sizzling' sound for a few seconds, that oh so familiar odor, and the TR-7 went dead. I knew better, but I turned the TR-7 off and back on, but ... nothing.

My body is much less accommodatingthe last couple of years, and of course the power supply is on the floor between two cabinets, and the TR-7/R-7 is on a shelving arrangement on the desk with no back access. So I managed to clear the desk (no small feat initself) and slidthe TR-7 out and pulled the 4 pin connector. I was able, with difficulty, to get the PS-7 out far enough to pull thefuseholder, and sure enough ... smoked. So being the eternal optimist, I put in a new 8A fuse and switched the TR-7 back on with the strip switch. Hmmm, lights dimming slightly and humming from the supply so turned it back off.

I had been intending to put another TR-7 in that spot because the present one had way too much loss in the 500 ohm filter. My wife was able to find the other TR-7, still packed in it's box from Atlanta 5 years ago ("We'll only be here a year or so"), and put it on the desk. Got another PS-7 and put it in place, plugged in all the cables and turned it on. Seemed to work fine until I noticed that when I keyed the transmitter, the R-7 didn't mute. Strange... So pulled it back out, pulled the TR-7/R-7 cable at the TR-7 end and was able to mute and unmute the receiver with a clip lead on the plug blades with no problem. Very Strange. Put an ohmmeter on the ACCY connector on the TR-7, showed continuity. When I keyed the transmitter the connection showed open, but when I released it, it didn't come back to short. Not a whole lot tothat 'circuit', so I put in a new relay, and working fine! I hate those wire hold-downs on the relays!!!

Anyway, back in action. I suspect a shorted filter cap in the PS-7, and perhaps a blown PIN diode in the filter switching in the TR-7. So now all I got to do is get Carol to move these suckers to the bench so I can FIX them both.

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

13025. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:24:39 UTC
From: Don Cunningham
Topic: 13024 Message: 13025

Garey,

Has anyone done any research on the big capacitors in our PS-7 supplies as yet?? It may be time we ALL rebuild the one or two supplies that we use the most and prevent this happening to all of us!! We are good about recapping our 4 Line gear, and the TR7 isn't that much younger. What do you think??
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6231 - Release Date: 04/07/13

[Non-text portions of this message have been removed]

13026. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:46:35 UTC
From: Jim Shorney
Topic: 13024 Message: 13026

Oh, so you're not needing repair advice then? :D

73

-Jim (running and ducking)
NU0C

On Sun, 07 Apr 2013 22:19:56 -0400, Garey Barrell wrote:

>
>I was sitting at my desk yesterday afternoonwith the 7-Line on 40M CW
>with the gain turned down, just to have some background music.
>Suddenly, I noticed that there was a 'sizzling' sound for a few
>seconds, that oh so familiar odor, and the TR-7 went dead. I knew
>better, but I turned the TR-7 off and back on, but ... nothing.
>
>My body is much less accommodatingthe last couple of years, and of
>course the power supply is on the floor between two cabinets, and the
>TR-7/R-7 is on a shelving arrangement on the desk with no back access.
>So I managed to clear the desk (no small feat initself) and slidthe
>TR-7 out and pulled the 4 pin connector. I was able, with difficulty,
>to get the PS-7 out far enough to pull thefuseholder, and sure enough
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>switched the TR-7 back on with the strip switch. Hmmm, lights dimming
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>
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>present one had way too much loss in the 500 ohm filter. My wife was
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>years ago ("We'll only be here a year or so"), and put it on the
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>keyed the transmitter, the R-7 didn't mute. Strange... So pulled it
>back out, pulled the TR-7/R-7 cable at the TR-7 end and was able to
>mute and unmute the receiver with a clip lead on the plug blades with
>no problem. Very Strange. Put an ohmmeter on the ACCY connector on
>the TR-7, showed continuity. When I keyed the transmitter the
>connection showed open, but when I released it, it didn't come back to
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>working fine! I hate those wire hold-downs on the relays!!!
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>Anyway, back in action. I suspect a shorted filter cap in the PS-7,
>and perhaps a blown PIN diode in the filter switching in the TR-7. So
>now all I got to do is get Carol to move these suckers to the bench so
>I can FIX them both.
>

>--
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

13027. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:46:40 UTC
From: Don Cunningham
Topic: 13024 Message: 13027

I've done it again. Sending an email before I read it thoroughly. Of course I mean "done research on replacements for the big capacitors in our PS-7's". Man, it's so humbling getting old!!!!!!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6231 - Release Date: 04/07/13

[Non-text portions of this message have been removed]

13028. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:49:08 UTC
From: Don Cunningham
Topic: 13024 Message: 13028

Now, Jim, that's kicking a guy while he's down, LITERALLY!!! :>)
73,
Don

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6231 - Release Date: 04/07/13

[Non-text portions of this message have been removed]

13029. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 02:51:26 UTC
From: Jim Shorney
Topic: 13024 Message: 13029

I suspect that the PS-7 is so overbuilt that not many of them have failed yet.
And the life is extended when we add the optional fan.

73

-Jim
NU0C

On Sun, 7 Apr 2013 21:46:40 -0500, Don Cunningham wrote:

>I've done it again. Sending an email before I read it thoroughly. Of course I mean "done research on replacements for the big capacitors in our PS-7's". Man, it's so humbling getting old!!!!!!!!!
>73,
>Don, WB5HAK

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13030. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 03:03:03 UTC
From: Don Cunningham
Topic: 13024 Message: 13030

I suspect that you are right, Jim, but I'm getting like Garey and less able to do all this as we age. I may want to do one or two just in case and have that cushion out a bit further. I plan to have a TR7 when they plant me!!!
73,
Don

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6231 - Release Date: 04/07/13

[Non-text portions of this message have been removed]

13031. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 11:44:50 UTC
From: Steve Wedge
Topic: 13024 Message: 13031

It's nice to have help around the house, Garey. My XYL has helped me move a couple of NC-300's around lately

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, April 07, 2013 10:19 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] PS-7 Trouble

I was sitting at my desk yesterday afternoonwith the 7-Line on 40M CW with the gain turned down, just to have some background music. Suddenly, I noticed that there was a 'sizzling' sound for a few seconds, that oh so familiar odor, and the TR-7 went dead. I knew better, but I turned the TR-7 off and back on, but ... nothing.

My body is much less accommodatingthe last couple of years, and of course the power supply is on the floor between two cabinets, and the TR-7/R-7 is on a shelving arrangement on the desk with no back access. So I managed to clear the desk (no small feat initself) and slidthe TR-7 out and pulled the 4 pin connector. I was able, with difficulty, to get the PS-7 out far enough to pull thefuseholder, and sure enough ... smoked. So being the eternal optimist, I put in a new 8A fuse and switched the TR-7 back on with the strip switch. Hmmm, lights dimming slightly and humming from the supply so turned it back off.

I had been intending to put another TR-7 in that spot because the present one had way too much loss in the 500 ohm filter. My wife was able to find the other TR-7, still packed in it's box from Atlanta 5 years ago ("We'll only be here a year or so"), and put it on the desk. Got another PS-7 and put it in place, plugged in all the cables and turned it on. Seemed to work fine until I noticed that when I keyed the transmitter, the R-7 didn't mute. Strange... So pulled it back out, pulled the TR-7/R-7 cable at the TR-7 end and was able to mute and unmute the receiver with a clip lead on the plug blades with no problem. Very Strange. Put an ohmmeter on the ACCY connector on the TR-7, showed continuity. When I keyed the transmitter the connection showed open, but when I released it, it didn't come back to short. Not a whole lot tothat 'circuit', so I put in a new relay, and working fine! I hate those wire hold-downs on the relays!!!

Anyway, back in action. I suspect a shorted filter cap in the PS-7, and perhaps a blown PIN diode in the filter switching in the TR-7. So

now all I got to do is get Carol to move these suckers to the bench so
I can FIX them both.

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

[Non-text portions of this message have been removed]

13032. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 14:24:39 UTC
From: Wes Bolin
Topic: 13022 Message: 13032

I had some questions about component replacement, so I asked the question on a couple of groups/lists. Got various answers: Some liked the
'coils' and some said de-solder,strip the lead, and re-solder. I chose the 'coils'. Main reason is that I figured I would do more harm trying to desolder lugs, terminals, pins, etc than just using 'coils'. My project receiver was a
Hammarlund SP600 with over 60 capacitors needing replacement. Also, I learned that if I needed to remove a coil-lead component, it was very
easy to do and then add one back on the stub of lead. Plus, the 'coil' gave some mechanical stability along with electrical connection. But it was
most helpful when replacing capacitors buried under layers of components or stuck in inaccessible places.
I did de-solder some leads that had to be lifted so sub-assemblies could be removed. The manual actuated solder sucker pump worked very well.
I recommend it.Tried the manual pump built into a solder iron and didn't like it.
The 'coil' method works. My receiver played flawlessly after more than 60 Black Beauties of Death and a dozen more other capacitors were
replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
This is my experience, for what its worth.
Wes

From: Garey Barrell <k4oah@...>
To: DrakeRadio@...m
Sent: Sunday, April 7, 2013 8:57 PM
Subject: [DrakeRadio] Component Replacement

A 'discussion' has been going on over on that 'other' reflector (The "C" word) regarding the 'proper' procedure for replacing a component in one of our babies.

Several are touting the little Sprague coils (I forget the name, 'quigs?') that aretinned andfluxed. You cut the old component out, slip the 'coil' over the cutoff lead and poke the 'new' part lead intothe other end of the 'coil' andheat. Of course, most use a soldering ironbut I believe I recall back when they were being included in each package of caps from Sprague, that the instructions said it was as simple as heating it with a match or lighter!!. The idea is that you don't have to clean out a terminal strip and unwrap a wire to get the old one out. This led into solder removal techniques, Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The Hakko will clean solder out/off of anything smaller than abicycle frame, making it simple to merely unwrap the wire with a soldering aid tool. (Pointy end / bifurcated end.)

Drake had a 'better idea', just an eyelet filled with solder in a
board, heat the eyelet, pull out the old lead and poke in a new one! :-)

Eventually it got into the 'Art wouldn't have approved' discussion
(you DO know that each sealed PTO has air in it that was breathed by
Art don't you)?

--

73, Garey - K4OAH
Glen Allen, VA

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Yahoo! Groups Links

[Non-text portions of this message have been removed]

13033. Re: PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 13:40:05 UTC
From: hpolkscw
Topic: 13024 Message: 13033

> I suspect that the PS-7 is so overbuilt that not many of them have failed yet.
> And the life is extended when we add the optional fan.
>
> 73
>
> -Jim
> NU0C

Jim, you are right the PS-7 is a rugged piece of equipment. I had my PS-7 fail some time ago and blow the fuse, as designed. I turn on the system using a power strip and don't use the power switch on the TR-7. This is the first problem I have encountered with the PS-7 since purchasing it new in 1979.

After some trouble shooting one of the pass transistors was found shorted and caused the output voltage to rise to 26.2 volts. The voltage control system activated the SCR which shorted the output to ground and blew the fuse. Upon removing the pass transistors two of the transistors on one side had two insulating wafers under them and the one's on the other side did not have any wafers. This is how it was shipped from the Drake factory. The four pass transistors were replaced with higher value ones and the insulators are now under each one. The C228F3 SCR was replaced with a NTE5562 SCR as it showed very low resistance. The voltage is now correct at 13.6 volts.

I should replace the two 15K uf electrolytic capacitors in the PS but have not found replacements that would physically fit and reasonably priced. If anyone knows of a good source for these capacitors please let me know.

Gary, I read the digest from this group daily and appreciate the depth of knowledge here and the generosity of the group in helping with problems with the Drake radios. My first decent radio as a new ham was a TR-4 which I used for several years.

I am in need of a four position remote controlled antenna switch so i can use the dipoles on my tower. The one I was using, an old military type, failed after about 25 years.

73's
Harold
N3HP

13034. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 15:32:49 UTC
From: Garey Barrell
Topic: 13024 Message: 13034

I just want to say how much I appreciate the offers of support from my 'friends'!!!!!!!!! :-)

Always good to know you can depend on them for help!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Oh, so you're not needing repair advice then? :D
>
> 73
>
> -Jim (running and ducking)
> NU0C
>
>
> On Sun, 07 Apr 2013 22:19:56 -0400, Garey Barrell wrote:
>
>> I was sitting at my desk yesterday afternoonwith the 7-Line on 40M CW
>> with the gain turned down, just to have some background music.
>> Suddenly, I noticed that there was a 'sizzling' sound for a few
>> seconds, that oh so familiar odor, and the TR-7 went dead. I knew
>> better, but I turned the TR-7 off and back on, but ... nothing.
>>
>> My body is much less accommodatingthe last couple of years, and of
>> course the power supply is on the floor between two cabinets, and the
>> TR-7/R-7 is on a shelving arrangement on the desk with no back access.
>> So I managed to clear the desk (no small feat initself) and slidthe
>> TR-7 out and pulled the 4 pin connector. I was able, with difficulty,
>> to get the PS-7 out far enough to pull thefuseholder, and sure enough
>> ... smoked. So being the eternal optimist, I put in a new 8A fuse and
>> switched the TR-7 back on with the strip switch. Hmmm, lights dimming
>> slightly and humming from the supply so turned it back off.
>>
>> I had been intending to put another TR-7 in that spot because the
>> present one had way too much loss in the 500 ohm filter. My wife was
>> able to find the other TR-7, still packed in it's box from Atlanta 5
>> years ago ("We'll only be here a year or so"), and put it on the
>> desk. Got another PS-7 and put it in place, plugged in all the cables
>> and turned it on. Seemed to work fine until I noticed that when I
>> keyed the transmitter, the R-7 didn't mute. Strange... So pulled it

>> back out, pulled the TR-7/R-7 cable at the TR-7 end and was able to
>> mute and unmute the receiver with a clip lead on the plug blades with
>> no problem. Very Strange. Put an ohmmeter on the ACCY connector on
>> the TR-7, showed continuity. When I keyed the transmitter the
>> connection showed open, but when I released it, it didn't come back to
>> short. Not a whole lot tothat 'circuit', so I put in a new relay, and
>> working fine! I hate those wire hold-downs on the relays!!!
>>
>> Anyway, back in action. I suspect a shorted filter cap in the PS-7,
>> and perhaps a blown PIN diode in the filter switching in the TR-7. So
>> now all I got to do is get Carol to move these suckers to the bench so
>> I can FIX them both.
>>
>>

13035. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 16:39:21 UTC
From: W6IDS
Topic: 13022 Message: 13035

Wes, I had not thought about “quigs” for years. I recall them myself, they worked well. Found a couple of comments
in other forums that touched upon this very subject. Only issue would be, the reaction by boat anchor enthusiasts
and “purism.” Hmmm, maybe too, the reaction by those who have repair services available, like Garey for instance.

Here are those comments regarding “quigs”:

I believe they were called "quigs" and were made by Sprague.I would imagine that you could find some at an old tv repair shop if you can still find an old tv repair shop.You could probably make your own out of 20ga buss wire.Just use a nail as a former.

We have some of those springs, am not sure where they came from but I haven't used them...I just make a hook in the cut lead from where the old component was, filing it if necessary to remove oxidation, then make a hook in the new component lead, clamp both together firmly with needlenose and solder.

I just make a spiral quig from the extra length of wire on the new component. I just hold the lead against a miniature screwdriver and wrap it around 4 or 5 turns and cut the excess. I slip that over the stub of the old wire still soldered in place. Then I squeeze it on to the stub with a pliers for solid contact before soldering. Not the perfect cosmetic repair, but very good for matching original wire lengths and not disturbing settings.

Regards,

Howard W6IDS
Richmond, IN EM79NV

From: Wes Bolin
Sent: Monday, April 08, 2013 10:24 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Component Replacement

I had some questions about component replacement, so I asked the question on a couple of groups/lists. Got various answers: Some liked the
'coils' and some said de-solder,strip the lead, and re-solder. I chose the 'coils'.
Main reason is that I figured I would do more harm trying to desolder lugs, terminals, pins, etc than just using 'coils'. My project receiver was a
Hammarlund SP600 with over 60 capacitors needing replacement. Also, I learned that if I needed to remove a coil-lead component, it was very
easy to do and then add one back on the stub of lead. Plus, the 'coil' gave some mechanical stability along with electrical connection. But it was
most helpful when replacing capacitors buried under layers of components or stuck in inaccessible places.
I did de-solder some leads that had to be lifted so sub-assemblies could be removed. The

manual actuated solder sucker pump worked very well.
I recommend it.Tried the manual pump built into a solder iron and didn't like it.
The 'coil' method works. My receiver played flawlessly after more than 60 Black Beauties of Death and a dozen more other capacitors were
replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
This is my experience, for what its worth.
Wes

_____
From: Garey Barrell <mailto:k4oah%40mindspring.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Sunday, April 7, 2013 8:57 PM
Subject: [DrakeRadio] Component Replacement

A 'discussion' has been going on over on that 'other' reflector (The "C" word) regarding the 'proper' procedure for replacing a component in one of our babies.

Several are touting the little Sprague coils (I forget the name, 'quigs?') that aretinned andfluxed. You cut the old component out, slip the 'coil' over the cutoff lead and poke the 'new' part lead intothe other end of the 'coil' andheat. Of course, most use a soldering ironbut I believe I recall back when they were being included in each package of caps from Sprague, that the instructions said it was as simple as heating it with a match or lighter!!. The idea is that you don't have to clean out a terminal strip and unwrap a wire to get the old one out. This led into solder removal techniques, Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The Hakko will clean solder out/off of anything smaller than abicycle frame, making it simple to merely unwrap the wire with a soldering aid tool. (Pointy end / bifurcated end.)

Drake had a 'better idea', just an eyelet filled with solder in a board, heat the eyelet, pull out the old lead and poke in a new one! :-)

Eventually it got into the 'Art wouldn't have approved' discussion (you DO know that each sealed PTO has air in it that was breathed by Art don't you)?

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<http://www.k4oah.com/>

[Non-text portions of this message have been removed]

13036. Re: [DrakeRadio] Re: antenna switch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 17:05:24 UTC
From: Chgypsy@...
Topic: 13036 Message: 13036

hpolkscw@... writes:

I am in need of a four position remote controlled antenna switch so i can use the dipoles on my tower. The one I was using, an old military type, failed after about 25 years.
Harold N3HP

Well, if you can find one a Drake CS7 works very nicely. Carl wd8nhk

[Non-text portions of this message have been removed]

13037. Re: [DrakeRadio] Re: antenna switch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 17:25:43 UTC
From: Dan Galligan
Topic: 13036 Message: 13037

While I am not selling, and typically am not a fan of MFJ/Ameritron, I have an Ameritron RCS-4, that works quite well. No control wire, between the shack and the tower. Everything operates through the coax.
Just thought I'd mention this, in case you might wish to consider an Ameritron.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

It's not about the class of license the amateur holds.
It's about the class of the amateur, who holds the license.

Sent from my somewhat brighter, larger, electronic leash.

On Apr 8, 2013, at 10:05, Chgypsy@... wrote:

>
>
> hpolkscw@... writes:
>
> I am in need of a four position remote controlled antenna switch so i can
> use the dipoles on my tower. The one I was using, an old military type,
> failed after about 25 years.
> Harold N3HP
>
> Well, if you can find one a Drake CS7 works very nicely. Carl wd8nhk
>
>
> [Non-text portions of this message have been removed]
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> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

13038. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 17:26:18 UTC
From: Garey Barrell
Topic: 13022 Message: 13038

Howard -

I'm not totally against them. Their original intended use, if I remember correctly, (far from a 'done-deal',) was for repairs where you didn't have access to a soldering gun or other tools. I'malmost certain that the instructions said that if a soldering gun was not available, you could heat with a match or cigarette lighter, and both were far more available than a soldering gun in the 50's.

Today, we still find components in our boatanchors that are most inconveniently located and/or the builder followed the Heathkit directive to 'wrap the lead around the post to form a solid mechanical connection before soldering'. There is certainly nothing wrong with using a quig electrically or mechanically. Properly applied, they are every bit as solid as desoldering, unwrapping, rewrapping and resoldering. I freely admit to simply poking a hole in a terminal strip tag with a soldering aid, big enough to stick a 'new' component lead through, and soldering. I don't think I have ever 'wrapped' a lead around or through a terminal before soldering, but then I don't fly or drive my gear. To the best of my knowledge, none of the solder connections I have made over the last 60 years have failed due to mechanical stressor vibration.

At the other end of the spectrum, I have seen repairs allegedly done by 'professionals', where two wires were just 'touched' and soldered, then left hanging! Come to think of it, I've never found one of those 'broken' either!! Solder is strong stuff.

The Hakko desoldering 'gun', a soldering gun with a hole through the tip and to a filter and on to a built-in vacuum pump. Merely touching it to a soldered terminal or electrolytic soldered to a chassis, then pulling the trigger to start the pump, and the solder just disappears. Yeah, it's almost $200, but how many PC runs, wire insulation, other components, etc., have you destroyed, and what is your time worth?

Bottom line, I prefer making a new connection at the terminal, even if it is just a hole poked through a terminal tag, to a 'mid-air splice' using a quig. Certainly no better, or worse, from a 'functional' standpoint.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

W6IDS wrote:
> Wes, I had not thought about “quigs” for years. I recall them myself, they worked well. Found a couple of comments
> in other forums that touched upon this very subject. Only issue would be, the reaction by boat anchor enthusiasts
> and “purism.” Hmmm, maybe too, the reaction by those who have repair services available, like Garey for instance.
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>
>
> Regards,
>
> Howard W6IDS
> Richmond, IN EM79NV
>
>
> From: Wes Bolin
> Sent: Monday, April 08, 2013 10:24 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Component Replacement
>
>
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>
>
> _____
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> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Sunday, April 7, 2013 8:57 PM
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>
>
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> Hakko will clean solder out/off of anything smaller than abicycle
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>
> Drake had a 'better idea', just an eyelet filled with solder in a
> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
>
> Eventually it got into the 'Art wouldn't have approved' discussion
> (you DO know that each sealed PTO has air in it that was breathed by
> Art don't you)?
>

13039. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 17:59:52 UTC
From: W6IDS
Topic: 13022 Message: 13039

Well, that’s what I was interested in, Garey. Many thanks!

I must say it was a bit of a revelation too and some validation for ME as well in repair techniques. I’m glad the “guig” subject came up.

BTW, how do I order a CD set for the “B” Line?? Just do it? CC, debit??

Howard W6IDS
Richmond, IN Em79NV

From: Garey Barrell
Sent: Monday, April 08, 2013 1:26 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Component Replacement

Howard -

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73, Garey - K4OAH
Glen Allen, VA

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> Here are those comments regarding “quigs”:

<SNIP> <SNIP> - - - 8<- - - -8<- - - -

[Non-text portions of this message have been removed]

13040. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 18:30:41 UTC
From: Don Cunningham
Topic: 13024 Message: 13040

Well, what are friends for, Garey!!! :-)
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6232 - Release Date: 04/08/13

[Non-text portions of this message have been removed]

13041. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 18:49:06 UTC
From: Bob Macklin
Topic: 13022 Message: 13041

I simply clip the leads off the old component next to the component and then bend the remaining wire into a hook. I then clip and bend the leads of the new component to fit between the hooks and solder.

If the leads on the original component are to short I just remove the whole thing.

I find a soldering gun too big for most changes other than chassis mount capacitors.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 08, 2013 10:26 AM
Subject: Re: [DrakeRadio] Component Replacement

Howard -

I'm not totally against them. Their original intended use, if I remember correctly, (far from a 'done-deal',) was for repairs where you didn't have access to a soldering gun or other tools. I'malmost certain that the instructions said that if a soldering gun was not available, you could heat with a match or cigarette lighter, and both were far more available than a soldering gun in the 50's.

Today, we still find components in our boatanchors that are most inconveniently located and/or the builder followed the Heathkit directive to 'wrap the lead around the post to form a solid mechanical connection before soldering'. There is certainly nothing wrong with using a quig electrically or mechanically. Properly applied, they are every bit as solid as desoldering, unwrapping, rewrapping and resoldering. I freely admit to simply poking a hole in a terminal strip tag with a soldering aid, big enough to stick a 'new' component lead through, and soldering. I don't think I have ever 'wrapped' a lead around or through a terminal before soldering, but then I don't fly or drive my gear. To the best of my knowledge, none of the solder connections I have made over the last 60 years have failed due to mechanical stressor vibration.

At the other end of the spectrum, I have seen repairs allegedly done by 'professionals', where two wires were just 'touched' and soldered, then left hanging! Come to think of it, I've never found one of those 'broken' either!! Solder is strong stuff.

The Hakko desoldering 'gun', a soldering gun with a hole through the tip and to a filter and on to a built-in vacuum pump. Merely touching it to a soldered terminal or electrolytic soldered to a chassis, then pulling the trigger to start the pump, and the solder just disappears. Yeah, it's almost $200, but how many PC runs, wire insulation, other components, etc., have you destroyed, and what is your time worth?

Bottom line, I prefer making a new connection at the terminal, even if it is just a hole poked through a terminal tag, to a 'mid-air splice' using a quig. Certainly no better, or worse, from a 'functional' standpoint.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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W6IDS wrote:
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> and “purism.” Hmmm, maybe too, the reaction by those who have repair services available, like Garey for instance.
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> Here are those comments regarding “quigs”:
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> I believe they were called "quigs" and were made by Sprague.I would imagine that you could find some at an old tv repair shop if you can still find an old tv repair shop.You could probably make your own out of 20ga buss wire.Just use a nail as a former.
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> Regards,
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> Howard W6IDS
> Richmond, IN EM79NV

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> From: Wes Bolin
> Sent: Monday, April 08, 2013 10:24 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Component Replacement
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> replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
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>
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> From: Garey Barrell <mailto:k4oah%40mindspring.com>
> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Sunday, April 7, 2013 8:57 PM
> Subject: [DrakeRadio] Component Replacement
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[Non-text portions of this message have been removed]

13042. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 19:07:40 UTC
From: Mike Millen
Topic: 13022 Message: 13042

KW Electronics in the UK (50s & 60s) used them as standard construction method.

All the Rs & Cs that were connected to a valve (tube) base were left with their bodies pointing down.
Component legs that were to be connected together were all put into a "squig" (never heard the name before) & soldered.
If there was a wire to lead off elsewhere it also went into the squig, from the other direction.

It certainly makes repairs fairly easy. It's quite a tidy way to build stuff, too, so long as you have enough room.

Mike
M0MLM

----- Original Message -----
From: W6IDS
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 08, 2013 5:39 PM
Subject: Re: [DrakeRadio] Component Replacement

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Regards,

Howard W6IDS
Richmond, IN EM79NV

From: Wes Bolin
Sent: Monday, April 08, 2013 10:24 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Component Replacement

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This is my experience, for what its worth.
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From: Garey Barrell <mailto:k4oah%40mindspring.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Sunday, April 7, 2013 8:57 PM
Subject: [DrakeRadio] Component Replacement

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Drake had a 'better idea', just an eyelet filled with solder in a
board, heat the eyelet, pull out the old lead and poke in a new one! :-)

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[Non-text portions of this message have been removed]

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13043. RE: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 19:59:40 UTC
From: Ian Reeve
Topic: 13022 Message: 13043

Component replacement can be problematical and finding the least invasive method of replacement is best. I work a lot with the domestic valve radios and always use "coils". I got the idea from Tesla Radios, they were made that way as were some Philips models. A real bonus is you can make your own from solid core hook up wire or indeed surplus component leads. I have recently bought from a local hamfest here in the UK, 2 boxes of 100 resistors each suitable for valve equipment for ?1.00 . You can make the coils to take 2 or 3 leads and of course they are easily removable- just heat up slide off and discard. A real bonus too is if you are unsure whether a component is faulty, just snip one lead, hook up the new component, test, and if found not to be faulty, just pop the connections into a "coil" and solder.

Works every time and prevents desoldering and unravelling multi terminal connections. Looks neat and with practice looks really neat. I wind mine over a very small drill made for component lead hole drilling in PCB's

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: k5apl@...m
Date: Mon, 8 Apr 2013 07:24:39 -0700
Subject: Re: [DrakeRadio] Component Replacement

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Yahoo! Groups Links

[Non-text portions of this message have been removed]

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13044. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 20:17:37 UTC
From: Bernie
Topic: 13022 Message: 13044

Is there another name for these "quigs"? Have been looking for them on-line. As I recall, my dad had a boxfull but sadly they are both long gone. I just never knew what they were for...they sure weren't springs I could use. Anyone have a current source for them??

Bernie in ND
WD0GMD

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 08, 2013 12:26 PM
Subject: Re: [DrakeRadio] Component Replacement

Howard -

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13045. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 20:28:19 UTC
From: Dan Galligan
Topic: 13022 Message: 13045

Bernie,
Based on this thread, and the one previously, on "the other reflector", I will check with my buddies, Pat, W6PMD, who owns a TV repair shop, and John, KJ6PCY, who repairs TV's, and see if they might have a line on them, and I'll get back to y'all on the subject.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If you don't love it leave it. Let this....be your warning. When you're running down my country, man, you're walking on the fighting side of me."
Merle Haggard

Sent from my iPad.

On Apr 8, 2013, at 13:17, Bernie <barcand@...> wrote:

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>> Here are those comments regarding “quigs”:
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>> I believe they were called "quigs" and were made by Sprague.I would imagine that you could find some at an old tv repair shop if you can still find an old tv repair shop.You could probably make your own out of 20ga buss wire.Just use a nail as a former.
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>> We have some of those springs, am not sure where they came from but I haven't used them...I just make a hook in the cut lead from where the old component was, filing it if necessary to remove oxidation, then make a hook in the new component lead, clamp both together firmly with needlenose and solder.
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>>
>>
>> Regards,
>>
>> Howard W6IDS
>> Richmond, IN EM79NV
>>
>>
>> From: Wes Bolin
>> Sent: Monday, April 08, 2013 10:24 AM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Component Replacement
>>
>>
>> I had some questions about component replacement, so I asked the question on a couple of groups/lists. Got various answers: Some liked the
>> 'coils' and some said de-solder,strip the lead, and re-solder. I chose the 'coils'.
>> Main reason is that I figured I would do more harm trying to desolder lugs, terminals, pins, etc than just using 'coils'. My project receiver was a
>> Hammarlund SP600 with over 60 capacitors needing replacement. Also, I learned that if I needed to remove a coil-lead component, it was very
>> easy to do and then add one back on the stub of lead. Plus, the 'coil' gave some mechanical stability along with electrical connection. But it was
>> most helpful when replacing capacitors buried under layers of components or stuck in inaccessible places.
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>> I recommend it.Tried the manual pump built into a solder iron and didn't like it.
>> The 'coil' method works. My receiver played flawlessly after more than 60 Black Beauties of Death and a dozen more other capacitors were
>> replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
>> This is my experience, for what its worth.
>> Wes
>>
>>
>> _____
>> From: Garey Barrell <mailto:k4oah%40mindspring.com>

>> To: mailto:DrakeRadio%40yahoogroups.com
>> Sent: Sunday, April 7, 2013 8:57 PM
>> Subject: [DrakeRadio] Component Replacement
>>
>>
>> A 'discussion' has been going on over on that 'other' reflector (The
>> "C" word) regarding the 'proper' procedure for replacing a component
>> in one of our babies.
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>> Several are touting the little Sprague coils (I forget the name,
>> 'quigs?') that aretinned andfluxed. You cut the old component out,
>> slip the 'coil' over the cutoff lead and poke the 'new' part lead
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>> soldering ironbut I believe I recall back when they were being
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>> said it was as simple as heating it with a match or lighter!!. The
>> idea is that you don't have to clean out a terminal strip and unwrap a
>> wire to get the old one out. This led into solder removal techniques,
>> Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The
>> Hakko will clean solder out/off of anything smaller than abicycle
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>> tool. (Pointy end / bifurcated end.)
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>> Drake had a 'better idea', just an eyelet filled with solder in a
>> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
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>> Eventually it got into the 'Art wouldn't have approved' discussion
>> (you DO know that each sealed PTO has air in it that was breathed by
>> Art don't you)?
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13046. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 20:48:06 UTC
From: Garey Barrell
Topic: 13022 Message: 13046

Bernie -

Most guys are making their own. One guy made a tool, just a shank slightly larger than a component lead, and cut a slot in the end. Put a piece of tinned wire inthe slot, wind 6-8 turns around the shank, and cut it off. Cut off the bent end and you have a 'quig'. I'm not sure at all of that name, I keep thinking squib, but I know that's not right!!

The real ones had solder and flux on them, but if the wire is tinned and a bit of liquid flux is applied, they would probably work well enough to 'stick', and then you could flow a littlesolder on them.

They came with new boxes of Sprague capacitors, back when five capacitors came in a plastic box. I just checked my 1958 and 1967 Allied catalogs and no luck. I don't know that you could buy them separately, I assume that you could, but every shop I've worked in had a drawer full of them, ones that hadcome with caps and were unused. There were always plenty in the drawer!...

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
> Is there another name for these "quigs"? Have been looking for them on-line. As I recall, my dad had a boxfull but sadly they are both long gone. I just never knew what they were for...they sure weren't springs I could use. Anyone have a current source for them??
>
> Bernie in ND
> WD0GMD
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, April 08, 2013 12:26 PM
> Subject: Re: [DrakeRadio] Component Replacement
>
>
>
> Howard -
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> I'm not totally against them. Their original intended use, if I

> remember correctly, (far from a 'done-deal',) was for repairs where
> you didn't have access to a soldering gun or other tools. I'malmost
> certain that the instructions said that if a soldering gun was not
> available, you could heat with a match or cigarette lighter, and both
> were far more available than a soldering gun in the 50's.
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> Today, we still find components in our boatanchors that are most
> inconveniently located and/or the builder followed the Heathkit
> directive to 'wrap the lead around the post to form a solid mechanical
> connection before soldering'. There is certainly nothing wrong with
> using a quig electrically or mechanically. Properly applied, they are
> every bit as solid as desoldering, unwrapping, rewrapping and
> resoldering. I freely admit to simply poking a hole in a terminal
> strip tag with a soldering aid, big enough to stick a 'new' component
> lead through, and soldering. I don't think I have ever 'wrapped' a
> lead around or through a terminal before soldering, but then I don't
> fly or drive my gear. To the best of my knowledge, none of the solder
> connections I have made over the last 60 years have failed due to
> mechanical stressor vibration.
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> At the other end of the spectrum, I have seen repairs allegedly done
> by 'professionals', where two wires were just 'touched' and soldered,
> then left hanging! Come to think of it, I've never found one of those
> 'broken' either!! Solder is strong stuff.
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> tip and to a filter and on to a built-in vacuum pump. Merely touching
> it to a soldered terminal or electrolytic soldered to a chassis, then
> pulling the trigger to start the pump, and the solder just disappears.
> Yeah, it's almost $200, but how many PC runs, wire insulation, other
> components, etc., have you destroyed, and what is your time worth?
>
> Bottom line, I prefer making a new connection at the terminal, even if
> it is just a hole poked through a terminal tag, to a 'mid-air splice'
> using a quig. Certainly no better, or worse, from a 'functional'
> standpoint.
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> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> > Wes, I had not thought about “quigs” for years. I recall them myself, they worked well.
Found a couple of comments
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by boat anchor enthusiasts
> > and “purism.” Hmmm, maybe too, the reaction by those who have repair services

available, like Garey for instance.
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> > I believe they were called "quigs" and were made by Sprague.I would imagine that you could find some at an old tv repair shop if you can still find an old tv repair shop.You could probably make your own out of 20ga buss wire.Just use a nail as a former.
> >
> >
> > We have some of those springs, am not sure where they came from but I haven't used them...I just make a hook in the cut lead from where the old component was, filing it if necessary to remove oxidation, then make a hook in the new component lead, clamp both together firmly with needlenose and solder.
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> > Hammarlund SP600 with over 60 capacitors needing replacement. Also, I learned that if I needed to remove a coil-lead component, it was very
> > easy to do and then add one back on the stub of lead. Plus, the 'coil' gave some mechanical stability along with electrical connection. But it was
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> > I recommend it.Tried the manual pump built into a solder iron and didn't like it.
> > The 'coil' method works. My receiver played flawlessly after more than 60 Black Beauties of Death and a dozen more other capacitors were

> > replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
> > This is my experience, for what its worth.
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> > _____
> > From: Garey Barrell <mailto:k4oah%40mindspring.com>
> > To: mailto:DrakeRadio%40yahoogroups.com
> > Sent: Sunday, April 7, 2013 8:57 PM
> > Subject: [DrakeRadio] Component Replacement
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> >
> > A 'discussion' has been going on over on that 'other' reflector (The
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links

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13047. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 20:52:09 UTC
From: Al Parker
Topic: 13022 Message: 13047

I thought they were "squigs"

73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 4/8/2013 4:48 PM, Garey Barrell wrote:
> Bernie -
>
> Most guys are making their own. One guy made a tool, just a shank
> slightly larger than a component lead, and cut a slot in the end. Put
> a piece of tinned wire inthe slot, wind 6-8 turns around the shank,
> and cut it off. Cut off the bent end and you have a 'quig'. I'm not
> sure at all of that name, I keep thinking squib, but I know that's not
> right!!

13048. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 20:56:46 UTC
From: Dan Galligan
Topic: 13022 Message: 13048

I just got off the phone, from talking with Pat. He remembers them as an electronic version of a condiment, that came with resistors, capacitors and such, in a cellophane pack. He even described the cellophane, as being the type to turn orange, with age.

Pat said that they were like automatically getting catsup, salt, or pepper, with fast food. It was pretty much automatic. He said that he couldn't begin to imagine, how many he likely just tossed away, over the years. They, like most everything else, went away, like replacing individual components. It is so rare in the TV industry, today, to replace an individual part, just like everywhere else in the electronics industry.

But, between he, and his repairmen, they can't remember the name of them as being, or not being, "Quigs". It's just been too long since they used them, that he just can't recall the name. He's been in the business, more than 40 years, and one of his repairmen, substantially longer than he.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If you don't love it leave it. Let this....be your warning. When you're running down my country, man, you're walking on the fighting side of me."
Merle Haggard

Sent from my iPad.

On Apr 8, 2013, at 13:28, Dan Galligan <w3rxo@...> wrote:

> Bernie,
> Based on this thread, and the one previously, on "the other reflector", I will check with my buddies, Pat, W6PMD, who owns a TV repair shop, and John, KJ6PCY, who repairs TV's, and see if they might have a line on them, and I'll get back to y'all on the subject.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> "If you don't love it leave it. Let this....be your warning. When you're running down my country, man, you're walking on the fighting side of me."
> Merle Haggard
>
> Sent from my iPad.
>
> On Apr 8, 2013, at 13:17, Bernie <barcand@...> wrote:

>
>> Is there another name for these "quigs"? Have been looking for them on-line. As I recall, my dad had a boxfull but sadly they are both long gone. I just never knew what they were for...they sure weren't springs I could use. Anyone have a current source for them??
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>> Bernie in ND
>> WD0GMD
>>
>> ----- Original Message -----
>> From: Garey Barrell
>> To: DrakeRadio@yahoogroups.com
>> Sent: Monday, April 08, 2013 12:26 PM
>> Subject: Re: [DrakeRadio] Component Replacement
>>
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>> Glen Allen, VA
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>>> Richmond, IN EM79NV
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>>> Sent: Monday, April 08, 2013 10:24 AM

>>> To: DrakeRadio@yahoogroups.com
>>> Subject: Re: [DrakeRadio] Component Replacement
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>>> This is my experience, for what its worth.
>>> Wes
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>>> _____
>>> From: Garey Barrell <mailto:k4oah%40mindspring.com>
>>> To: mailto:DrakeRadio%40yahoogroups.com
>>> Sent: Sunday, April 7, 2013 8:57 PM
>>> Subject: [DrakeRadio] Component Replacement
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>>> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
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[Non-text portions of this message have been removed]

13049. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 21:20:13 UTC
From: Garey Barrell
Topic: 13024 Message: 13049

Jim -

Yeah, this one had the fan on it, and really not heavy use as I
normally run my B-Line.

I'm at a disadvantage because it's sitting on a chair, (bench is
full,) but it appears that at least two of the pass transistors are
shorted.

Couple of questions you or someone else may be able to answer.

1. Do the pass transistor covers just pry off?

2. Someone mentioned 'better' transistors?

3 Does the SCR typically fail when tripped?

Any other tips, hints??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> I suspect that the PS-7 is so overbuilt that not many of them have failed yet.
> And the life is extended when we add the optional fan.
>
> 73
>
> -Jim
> NU0C
>

13050. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 21:29:06 UTC
From: Chgypsy@...
Topic: 13024 Message: 13050

In a message dated 4/8/2013 5:20:37 P.M. Eastern Daylight Time,
k4oah@... writes:

1. Do the pass transistor covers just pry off?
Sure looks that way on both of my PS7's Carl wd8nhk
2 Yep someone did. # 3 can't picture that.

[Non-text portions of this message have been removed]

13051. Re: Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-08 21:11:07 UTC
From: wb4spb
Topic: 13022 Message: 13051

For a couple of years, I've been essentially winding my own "quigs" (if that's what we're calling them) onto replacement component leads using the technique described in this video: http://www.youtube.com/watch?v=OI9P01eYbjA

It's pretty obvious stuff, but the video did me the favor of telling me what tool to use.

As there are no loose pieces to fool with, I find I can get components fitted in rather tight spots using needle-nose pliers, tweezers, and the like. And I like the way they look.

73,
Randy WB4SPB

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> I just got off the phone, from talking with Pat. He remembers them as an electronic version of a condiment, that came with resistors, capacitors and such, in a cellophane pack. He even described the cellophane, as being the type to turn orange, with age.
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> Pat said that they were like automatically getting catsup, salt, or pepper, with fast food. It was pretty much automatic. He said that he couldn't begin to imagine, how many he likely just tossed away, over the years. They, like most everything else, went away, like replacing individual components. It is so rare in the TV industry, today, to replace an individual part, just like everywhere else in the electronics industry.
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> 73,
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> "If you don't love it leave it. Let this....be your warning. When you're running down my country, man, you're walking on the fighting side of me."
> Merle Haggard
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> Sent from my iPad.
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> On Apr 8, 2013, at 13:28, Dan Galligan <w3rxo@...> wrote:
>
. . .

13052. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 00:47:10 UTC
From: Fernando
Topic: 13022 Message: 13052

Hello

I too belong to that other list and considered a heretic, washing my Collins rigs (oops)

with Simple green, a water hose and oven dried.

Anyhoot, I've been using the 'quigs' method to do all of them.

Here is my version of a tool made from hobby brass tubing, less than $5.

<http://youtu.be/GRjHuiBfYTc>

And if you care, here is me washing the KWM-2A. They all talk about it

but none have shown it done.

<http://youtu.be/j1fSRVwbSTo>

NOTE: Thinking of being a smart one, I tried the same on an old Underwood

typewriter. It was rusted the next day. Sold it for the typewriter keys.

So.. I wouldn't try this on a steel base rig, like a Halli or such.

Back to my hole.

Fernando N2FQ/6
n2fq@...

On Apr 8, 2013, at 1:48 PM, Garey Barrell <k4oah@...> wrote:

> Bernie -
>
> Most guys are making their own. One guy made a tool, just a shank
> slightly larger than a component lead, and cut a slot in the end. Put
> a piece of tinned wire inthe slot, wind 6-8 turns around the shank,
> and cut it off. Cut off the bent end and you have a 'quig'. I'm not
> sure at all of that name, I keep thinking squib, but I know that's not
> right!!
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> The real ones had solder and flux on them, but if the wire is tinned
> and a bit of liquid flux is applied, they would probably work well
> enough to 'stick', and then you could flow a littlesolder on them.
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> They came with new boxes of Sprague capacitors, back when five
> capacitors came in a plastic box. I just checked my 1958 and 1967
> Allied catalogs and no luck. I don't know that you could buy them
> separately, I assume that you could, but every shop I've worked in had
> a drawer full of them, ones that hadcome with caps and were unused.

> There were always plenty in the drawer!...
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Bernie wrote:
>> Is there another name for these "quigs"? Have been looking for them on-line. As I recall, my dad had a boxfull but sadly they are both long gone. I just never knew what they were for...they sure weren't springs I could use. Anyone have a current source for them??
>>
>> Bernie in ND
>> WD0GMD
>>
>> ----- Original Message -----
>> From: Garey Barrell
>> To: DrakeRadio@yahoogroups.com
>> Sent: Monday, April 08, 2013 12:26 PM
>> Subject: Re: [DrakeRadio] Component Replacement
>>
>>
>>
>> Howard -
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>> I'm not totally against them. Their original intended use, if I
>> remember correctly, (far from a 'done-deal',) was for repairs where
>> you didn't have access to a soldering gun or other tools. I'malmost
>> certain that the instructions said that if a soldering gun was not
>> available, you could heat with a match or cigarette lighter, and both
>> were far more available than a soldering gun in the 50's.
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>> Today, we still find components in our boatanchors that are most
>> inconveniently located and/or the builder followed the Heathkit
>> directive to 'wrap the lead around the post to form a solid mechanical
>> connection before soldering'. There is certainly nothing wrong with
>> using a quig electrically or mechanically. Properly applied, they are
>> every bit as solid as desoldering, unwrapping, rewrapping and
>> resoldering. I freely admit to simply poking a hole in a terminal
>> strip tag with a soldering aid, big enough to stick a 'new' component
>> lead through, and soldering. I don't think I have ever 'wrapped' a
>> lead around or through a terminal before soldering, but then I don't
>> fly or drive my gear. To the best of my knowledge, none of the solder
>> connections I have made over the last 60 years have failed due to
>> mechanical stressor vibration.
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>> At the other end of the spectrum, I have seen repairs allegedly done
>> by 'professionals', where two wires were just 'touched' and soldered,

>> then left hanging! Come to think of it, I've never found one of those
>> 'broken' either!! Solder is strong stuff.
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>> The Hakko desoldering 'gun', a soldering gun with a hole through the
>> tip and to a filter and on to a built-in vacuum pump. Merely touching
>> it to a soldered terminal or electrolytic soldered to a chassis, then
>> pulling the trigger to start the pump, and the solder just disappears.
>> Yeah, it's almost $200, but how many PC runs, wire insulation, other
>> components, etc., have you destroyed, and what is your time worth?
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>> Bottom line, I prefer making a new connection at the terminal, even if
>> it is just a hole poked through a terminal tag, to a 'mid-air splice'
>> using a quig. Certainly no better, or worse, from a 'functional'
>> standpoint.
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>> W6IDS wrote:
>>> Wes, I had not thought about ?quigs? for years. I recall them myself, they worked well. Found a couple of comments
>>> in other forums that touched upon this very subject. Only issue would be, the reaction by boat anchor enthusiasts
>>> and ?purism.? Hmmm, maybe too, the reaction by those who have repair services available, like Garey for instance.
>>>
>>> Here are those comments regarding ?quigs?:
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>>> I believe they were called "quigs" and were made by Sprague.I would imagine that you could find some at an old tv repair shop if you can still find an old tv repair shop.You could probably make your own out of 20ga buss wire.Just use a nail as a former.
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>>> We have some of those springs, am not sure where they came from but I haven't used them...I just make a hook in the cut lead from where the old component was, filing it if necessary to remove oxidation, then make a hook in the new component lead, clamp both together firmly with needlenose and solder.
>>>
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>>> I just make a spiral quig from the extra length of wire on the new component. I just hold the lead against a miniature screwdriver and wrap it around 4 or 5 turns and cut the excess. I slip that over the stub of the old wire still soldered in place. Then I squeeze it on to the stub with a pliers for solid contact before soldering. Not the perfect cosmetic repair, but very good for matching original wire lengths and not disturbing settings.
>>>

>>>
>>> Regards,
>>>
>>> Howard W6IDS
>>> Richmond, IN EM79NV
>>>
>>>
>>> From: Wes Bolin
>>> Sent: Monday, April 08, 2013 10:24 AM
>>> To: DrakeRadio@yahoogroups.com
>>> Subject: Re: [DrakeRadio] Component Replacement
>>>
>>>
>>> I had some questions about component replacement, so I asked the question on a couple of groups/lists. Got various answers: Some liked the
>>> 'coils' and some said de-solder,strip the lead, and re-solder. I chose the 'coils'.
>>> Main reason is that I figured I would do more harm trying to desolder lugs, terminals, pins, etc than just using 'coils'. My project receiver was a
>>> Hammarlund SP600 with over 60 capacitors needing replacement. Also, I learned that if I needed to remove a coil-lead component, it was very
>>> easy to do and then add one back on the stub of lead. Plus, the 'coil' gave some mechanical stability along with electrical connection. But it was
>>> most helpful when replacing capacitors buried under layers of components or stuck in inaccessible places.
>>> I did de-solder some leads that had to be lifted so sub-assemblies could be removed. The manual actuated solder sucker pump worked very well.
>>> I recommend it.Tried the manual pump built into a solder iron and didn't like it.
>>> The 'coil' method works. My receiver played flawlessly after more than 60 Black Beauties of Death and a dozen more other capacitors were
>>> replaced using this method. I also used 'coils' when re-capping my Drake 2B. Easy job, and it works great too.
>>> This is my experience, for what its worth.
>>> Wes
>>>
>>>
>>> _____
>>> From: Garey Barrell <mailto:k4oah%40mindspring.com>
>>> To: mailto:DrakeRadio%40yahoogroups.com
>>> Sent: Sunday, April 7, 2013 8:57 PM
>>> Subject: [DrakeRadio] Component Replacement
>>>
>>>
>>> A 'discussion' has been going on over on that 'other' reflector (The
>>> "C" word) regarding the 'proper' procedure for replacing a component
>>> in one of our babies.
>>>
>>> Several are touting the little Sprague coils (I forget the name,
>>> 'quigs?') that aretinned andfluxed. You cut the old component out,
>>> slip the 'coil' over the cutoff lead and poke the 'new' part lead
>>> intothe other end of the 'coil' andheat. Of course, most use a

>>> soldering ironbut I believe I recall back when they were being
>>> included in each package of caps from Sprague, that the instructions
>>> said it was as simple as heating it with a match or lighter!!. The
>>> idea is that you don't have to clean out a terminal strip and unwrap a
>>> wire to get the old one out. This led into solder removal techniques,
>>> Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The
>>> Hakko will clean solder out/off of anything smaller than abicycle
>>> frame, making it simple to merely unwrap the wire with a soldering aid
>>> tool. (Pointy end / bifurcated end.)
>>>
>>> Drake had a 'better idea', just an eyelet filled with solder in a
>>> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
>>>
>>> Eventually it got into the 'Art wouldn't have approved' discussion
>>> (you DO know that each sealed PTO has air in it that was breathed by
>>> Art don't you)?
>>>
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>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13053. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 00:54:59 UTC
From: Ken Winterling
Topic: 13022 Message: 13053

To All,

Please see the article in the following link where the coiled wire device
is called a quig. Instructions for making a quig winder are included.
http://www.skywaves.ar88.net/commrx/Maintenance/Comprepl/component_replacement.htm

I often just wind a "quig" on the end of the replacement component rather
than install a separate coil on the joint. The advantage is that it is a
one step process and I can hold the component in the desired position while
soldering the joint.

Ken
WA2LBI

On Mon, Apr 8, 2013 at 4:52 PM, Al Parker <anchor@...> wrote:

> I thought they were "squigs"
>
> 73,
>
> Al, W8UT
> www.boatanchors.org
> www.hammarlund.info
>
> "There is nothing -- absolutely nothing -- half so much
> worth doing as simply messing about in boats"
> Ratty, to Mole
>
> On 4/8/2013 4:48 PM, Garey Barrell wrote:
> > Bernie -
> >
> > Most guys are making their own. One guy made a tool, just a shank
> > slightly larger than a component lead, and cut a slot in the end. Put
> > a piece of tinned wire inthe slot, wind 6-8 turns around the shank,
> > and cut it off. Cut off the bent end and you have a 'quig'. I'm not
> > sure at all of that name, I keep thinking squib, but I know that's not
> > right!!
>

[Non-text portions of this message have been removed]

13054. Drake CC-1 and TC-2

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 01:09:26 UTC
From: k5fex
Topic: 13054 Message: 13054

Have receive and transmit converters I'd like to sell. Both units purchased as additions to my Drake collection. Just no room at the inn!

Have not operated either unit.

Make offer for either or both pieces. Send email to oilieone@...

Thanks everyone!
73
Wayne
K5FEX

13055. Re: [DrakeRadio] PS-7 Trouble

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 01:34:21 UTC
From: Jim Shorney
Topic: 13024 Message: 13055

Well, I would have helped, but you seem to know pretty much everything. :)

Leep us advised as to what you find.

73

-Jim
NU0C

On Mon, 08 Apr 2013 11:32:49 -0400, Garey Barrell wrote:

>I just want to say how much I appreciate the offers of support from my
>'friends'!!!!!!!!! :-)
>
>Always good to know you can depend on them for help!
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> Oh, so you're not needing repair advice then? :D
>>
>> 73
>>
>> -Jim (running and ducking)
>> NU0C
>>
>>
>> On Sun, 07 Apr 2013 22:19:56 -0400, Garey Barrell wrote:
>>
>>> I was sitting at my desk yesterday afternoonwith the 7-Line on 40M CW
>>> with the gain turned down, just to have some background music.
>>> Suddenly, I noticed that there was a 'sizzling' sound for a few
>>> seconds, that oh so familiar odor, and the TR-7 went dead. I knew
>>> better, but I turned the TR-7 off and back on, but ... nothing.
>>>
>>> My body is much less accommodatingthe last couple of years, and of
>>> course the power supply is on the floor between two cabinets, and the
>>> TR-7/R-7 is on a shelving arrangement on the desk with no back access.
>>> So I managed to clear the desk (no small feat initself) and slidthe
>>> TR-7 out and pulled the 4 pin connector. I was able, with difficulty,
>>> to get the PS-7 out far enough to pull thefuseholder, and sure enough

>>> ... smoked. So being the eternal optimist, I put in a new 8A fuse and
>>> switched the TR-7 back on with the strip switch. Hmmm, lights dimming
>>> slightly and humming from the supply so turned it back off.
>>>
>>> I had been intending to put another TR-7 in that spot because the
>>> present one had way too much loss in the 500 ohm filter. My wife was
>>> able to find the other TR-7, still packed in it's box from Atlanta 5
>>> years ago ("We'll only be here a year or so"), and put it on the
>>> desk. Got another PS-7 and put it in place, plugged in all the cables
>>> and turned it on. Seemed to work fine until I noticed that when I
>>> keyed the transmitter, the R-7 didn't mute. Strange... So pulled it
>>> back out, pulled the TR-7/R-7 cable at the TR-7 end and was able to
>>> mute and unmute the receiver with a clip lead on the plug blades with
>>> no problem. Very Strange. Put an ohmmeter on the ACCY connector on
>>> the TR-7, showed continuity. When I keyed the transmitter the
>>> connection showed open, but when I released it, it didn't come back to
>>> short. Not a whole lot tothat 'circuit', so I put in a new relay, and
>>> working fine! I hate those wire hold-downs on the relays!!!
>>>
>>> Anyway, back in action. I suspect a shorted filter cap in the PS-7,
>>> and perhaps a blown PIN diode in the filter switching in the TR-7. So
>>> now all I got to do is get Carol to move these suckers to the bench so
>>> I can FIX them both.
>>>
>>>
>
>

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

13056. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 01:41:12 UTC
From: Dan Galligan
Topic: 13022 Message: 13056

Fernando,
I remember, several years ago, when I was looking for service on my "B" Line, reading, likely on QTH, eHam, or QRZ, about a fellow, who cleaned his Drakes in the dishwasher!!! He swore that he never had any negative results.
I guess that if it gets properly dried out, this wouldn't be problematic. I wouldn't try it, though.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

"If you don't love it leave it. Let this....be your warning. When you're running down my country, man, you're walking on the fighting side of me."
Merle Haggard

Sent from my iPad.

On Apr 8, 2013, at 17:47, Fernando <n2fq@sbcglobal.net> wrote:

> Hello
>
> I too belong to that other list and considered a heretic, washing my Collins rigs (oops)
>
> with Simple green, a water hose and oven dried.
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> Anyhoot, I've been using the 'quigs' method to do all of them.
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> Here is my version of a tool made from hobby brass tubing, less than $5.
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> <http://youtu.be/GRjHuiBfYTc>
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> And if you care, here is me washing the KWM-2A. They all talk about it
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> but none have shown it done.
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>
> NOTE: Thinking of being a smart one, I tried the same on an old Underwood
>
> typewriter. It was rusted the next day. Sold it for the typewriter keys.
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> So.. I wouldn't try this on a steel base rig, like a Halli or such.
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>> separately, I assume that you could, but every shop I've worked in had
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>>> Sent: Monday, April 08, 2013 12:26 PM
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>>>> Eventually it got into the 'Art wouldn't have approved' discussion
>>>> (you DO know that each sealed PTO has air in it that was breathed by
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>>> [Non-text portions of this message have been removed]
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>>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13057. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 01:56:38 UTC
From: Jim Shorney
Topic: 13022 Message: 13057

On Sun, 07 Apr 2013 21:57:30 -0400, Garey Barrell wrote:

>This led into solder removal techniques,
>Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The
>Hakko will clean solder out/off of anything smaller than abicycle
>frame, making it simple to merely unwrap the wire with a soldering aid
>tool. (Pointy end / bifurcated end.)

I've used them all. Solda-Pullit is my daily driver at home. At work, I'm a big fan of both the Hakko and Pace vacuum irons that I have used over the years. They do require diligent maintenance, but the results are well worth it. No-lead solder seems to be especially hard on them, but I only have to deal with that crap at work. There is also a bit of a knack to using them. I don't know how many people I have heard over the years try them without proper instruction, only to declare them "junk" and move on.

I've pulled several decent ESD black Solda-Pullits out of the trash because the people that use them don't seem to realize that they need to be cleaned out once in a while. Go figure.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13058. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 02:03:26 UTC
From: Robert Logan
Topic: 13022 Message: 13058

Beautiful job on that 779, Al.

Bob, NZ5A

Sent from my iPhone

On Apr 8, 2013, at 3:52 PM, Al Parker <anchor@...> wrote:

I thought they were "squigs"

73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 4/8/2013 4:48 PM, Garey Barrell wrote:
> Bernie -
>
> Most guys are making their own. One guy made a tool, just a shank
> slightly larger than a component lead, and cut a slot in the end. Put
> a piece of tinned wire inthe slot, wind 6-8 turns around the shank,
> and cut it off. Cut off the bent end and you have a 'quig'. I'm not
> sure at all of that name, I keep thinking squib, but I know that's not
> right!!

[Non-text portions of this message have been removed]

13059. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 02:45:43 UTC
From: Howard Traxler
Topic: 12538 Message: 13059

Thanks, Garey.

Got the finals cleaned up and back in place--and believe it or not, I didn't destroy the lettering on the tubes.

Checked for carrier at the two tubes you said and there is nothing. I thought it was just the receiver that didn't work but it looks like both transmitter and receiver.

Is there a next step--other than box it up to send away, hi hi?

Getting the cage back on was tuff. The XYL put the screws in for me. My fingers just wouldn't go in where one of those screws had to go.

73 and thanks.
Howard, WA9RYF
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, April 06, 2013 2:30 PM
Subject: Re: [DrakeRadio] My non-working TR-4

Howard -

You really need a CD... :-) Pulling the finals is no big deal. Just becareful when you remove the top cap and swing them carefully out of the way. Inspect the solder connections to the RF Choke 'post' that they all connect to to make sure they don't crack when you finish and have the caps back on the tubes. All three tubes are the same, so it doesn't matter which order they are in. Remember the power is off and the Power Supply is disconnected.

There are four tubesin a rectangle just in front of the PA cage, along the side of the chassis. Looking down from the top, with the front panel 'to' you, V6 is the top right tube of the group, and V4 is the lower left tube. V4 is the Mixer and V6 is the Driver for the PA.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Thanks Gary.
> Finally got the XYL down there to help get the bias set correctly.
>
> Now, I'd like to put the final cage back on before I have a problem. That's gonna be tuff

because one of those screws goes where my fingers won't fit. Maybe another job for the XYL. But, before I put the cage back, I'd like to clean the dust and crud off the finals. XYL suggests we keep track of the numbers, etc., and write them back on with a marking pencil. What does anybody think?
>
> Gary, you mentioned to check signal at v4 and v6. Wonder ifyou can describe how to find those tubes--with my eyes shut.
>
>
> Thanks,
> Howard
> v
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, March 30, 2013 10:57 AM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Howard -
>
> First, the BIAS should be set for 0.1A, not 1.5A! The idle current
> should be set to 0.1A.
>
> Listening on a separate receiver, can you HEAR a signal on 40M when
> you key the transmitter, even a very weak one.
>
> Using your external receiver with a little sample loop for an antenna,
> put the loop near V4 and see if you can hear a 7.000 MHz signal with
> the PTO of the TR-4 set to 000. This would be in TUNE mode, -x on the
> SIDEBAND switch. If you can, see if it's stronger at V6. Keep an eye
> on the PLATE meter to make sure the plate current doesn't jump up
> during this test.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
> > Thanks Garey, for the encouragement. I did take off the final cage (4 screws and 2 shafts) and the protection lamp shows close to 0 ohms. I think that means it's OK. I'd sure like to clean the dust off of those finals. It must be 1/16" thick and sure smells when they start to get warm.
> >
> > Yes, (Got the XYL to take a look) when I key the PTT I was getting 100ma (I think that's what the 1 on the meter indicates). I set the bias down a bit so I'm now getting abut 150. I think that's what the mark between the 1 and 2 is for.

> >
> > Seems like I must be losing signal at an RF or mixer stage. What can I check next.
> >
> > Thank you very much for your suggestions. I sure hope I can get this one working without sending it away.
> >
> > Thanks and 73,
> > de
> > Howard, WA9RYF
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Sunday, March 24, 2013 10:32 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> > Howard -
> >
> > OK.
> >
> > The 9.00 MHz is good, and 'should' be heard on all bands. That is the
> > Carrier Oscillator. When you switch to CW or AM, it is 'moved' about
> > 1 kHz lower in frequency.
> >
> > The 21.5 MHz is good, and 'should' be heard only on 40M. That is the
> > Heterodyne Oscillator. It will be different for each band.
> >
> > When the PTO is tuned to the '000' point, it should be heard at 5
> > MHz. This is a tunable oscillator, and so may be a few kHz, (up to
> > 10,) either side of this frequency.
> >
> > The final cage isn't that hard to remove, the TUNE and LOAD shafts
> > just pull out of the couplers that go through the side, and then
> > remove the small screws. Obviously power off and power supply unplugged.
> >
> > You didn't answer whether you had PA Bias current when you closed the
> > PTTas described in Section 4, para A in the manual.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Howard Traxler wrote:
> > > Hi Garey and thanks. Finally got to check out the local oscilators.
> > >
> > > Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,

> > > Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
> > >
> > > Garey: the crystal oscillator runs at 21.5 MHz.
> > > Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
> > >
> > > I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
> > >
> > > Further suggestions, please? Thank you.
> > >
> > > Howard, WA9RYF
> > >
> > >
> > >
> > >
> > > ----- Original Message -----
> > > From: Garey Barrell
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Wednesday, March 13, 2013 11:53 AM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >
> > >
> > >
> > > On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> > > the crystal oscillator runs at 21.5 MHz.
> > >
> > > Yes, only PA tubes inside the cage.
> > >
> > > Don't remove tubes from sockets, just rock them back and forth a little one at a time.
> > >
> > > Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > Howard Traxler wrote:
> > > > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.

> > > >
> > > > Are the three finals the only tubes in the final cage?
> > > >
> > > > It's hard to physically check all the tubes. There are so many I get confused.
> > > >
> > > > Would that protection bulb be inside the cage with the finals?
> > > >
> > > > What frequency can I listen to to hear local oscilators from the receiver?
> > > >
> > > > These answers will give me something to do a while. Thanks to you and Don.
> > > >
> > > > 73, WA9RYF
> > > > ----- Original Message -----
> > > > From: Garey Barrell
> > > > To: DrakeRadio@yahoogroups.com
> > > > Sent: Wednesday, March 13, 2013 9:57 AM
> > > > Subject: Re: [DrakeRadio] My non-working TR-4
> > > >
> > > >
> > > >
> > > > Howard -
> > > >
> > > > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > > > #47 bulb, just with a bi-pin base.
> > > >
> > > > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT should clear up the
> > > > problem if that is the cause.
> > > >
> > > > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > > > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > > > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > > > rigs with ALL connected to their own antenna, the bulb isn't necessary.
> > > >
> > > > I assume it wasn't the slide switch on the side.?
> > > >
> > > > Do you have PA idle current when PTT is closed?
> > > >
> > > > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> > > > times. Not the PA tubes.
> > > >
> > >
>
>
>

>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

13060. TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 05:32:18 UTC
From: va3ag
Topic: 787 Message: 13060

Hi folks!

I recently bought a Drake TR-4C transceiver. The previous owner did not have a S230 Mic connector so he replaced it with a 1/4 inch stereo plug.
I need some help as follows:

1) I would like to get help on how to connect a Shure 450 to my TR-4C
1/4" stereo plug.

2) My TR-4C needs a bath (Good cleaning) ideas/suggestions etc.

Any help would be greatly appreciated.

Aldo VA3AG

13061. Re: [DrakeRadio] TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 06:30:06 UTC
From: Richard Knoppow
Topic: 787 Message: 13061

----- Original Message -----
From: "va3ag" <va3ag@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 08, 2013 10:32 PM
Subject: [DrakeRadio] TR-4C

> Hi folks!
>
> I recently bought a Drake TR-4C transceiver. The previous
> owner did not have a S230 Mic connector so he replaced it
> with a 1/4 inch stereo plug.
> I need some help as follows:
>
> 1) I would like to get help on how to connect a Shure 450
> to my TR-4C
> 1/4" stereo plug.
>
> 2) My TR-4C needs a bath (Good cleaning) ideas/suggestions
> etc.
>
> Any help would be greatly appreciated.
>
>
> Aldo VA3AG
>
The original plug is wired with the push to talk switch
going to the tip, the hot side of the microphone to the ring
and the ground for both going to the sleeve. If you do not
use PTT the tip does not have to be connected. Check the
wiring to the stereo plug to see if its wired the same way.
Or, push an unwired plug into the jack and short the tip and
sleeve momentarily. If its wired as the original was it
should key the transmitter.
The safest material to use for cleaning is liquid
dishwashing soap and warm water. Getting corrosion off the
copper plated chassis is difficult and will take some of the
copper off. IMO its better to just clean the dirt off. You
will get different advice from everyone on this, there are
lots of ways of cleaning. IMO the less you can get away
with the better; more stuff is broken by cleaning than any
other way.

--
Richard Knoppow
Los Angeles

WB6KBL
dickburk@...

13062. Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 07:31:06 UTC
From: va3ag
Topic: 787 Message: 13062

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "va3ag" <va3ag@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, April 08, 2013 10:32 PM
> Subject: [DrakeRadio] TR-4C
>
>
> > Hi folks!
> >
> > I recently bought a Drake TR-4C transceiver. The previous
> > owner did not have a S230 Mic connector so he replaced it
> > with a 1/4 inch stereo plug.
> > I need some help as follows:
> >
> > 1) I would like to get help on how to connect a Shure 450
> > to my TR-4C
> > 1/4" stereo plug.
> >
> > 2) My TR-4C needs a bath (Good cleaning) ideas/suggestions
> > etc.
> >
> > Any help would be greatly appreciated.
> >
> >
> > Aldo VA3AG
> >
> The original plug is wired with the push to talk switch
> going to the tip, the hot side of the microphone to the ring
> and the ground for both going to the sleeve. If you do not
> use PTT the tip does not have to be connected. Check the
> wiring to the stereo plug to see if its wired the same way.
> Or, push an unwired plug into the jack and short the tip and
> sleeve momentarily. If its wired as the original was it
> should key the transmitter.
> The safest material to use for cleaning is liquid
> dishwashing soap and warm water. Getting corrosion off the
> copper plated chassis is difficult and will take some of the
> copper off. IMO its better to just clean the dirt off. You
> will get different advice from everyone on this, there are
> lots of ways of cleaning. IMO the less you can get away
> with the better; more stuff is broken by cleaning than any
> other way.

>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Thanks for the advise Richard, I will try what you suggested about the mic connections and the cleaning. I have never cleaned a radio before and I do not like using water to clean electronic equipment but everyone seems to suggest what you are suggesting so I will give it a try. I need to get rid of the cigarette smoke smell. Again Thanks for the advise Richard.

73

Aldo VA3AG

13063. Re: [DrakeRadio] Component Replacement - 779

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 13:24:42 UTC
From: Al Parker
Topic: 13022 Message: 13063

Thanks Bob,
Al

On 4/8/2013 10:03 PM, Robert Logan wrote:
> Beautiful job on that 779, Al.
>
> Bob, NZ5A
>
> Sent from my iPhone
>
> On Apr 8, 2013, at 3:52 PM, Al Parker <anchor@...
> <mailto:anchor%40ec.rr.com>> wrote:
>
> I thought they were "squigs"
>
> 73,
>
> Al, W8UT

13064. Tinned Copper Wire 26ga Soft

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 13:42:08 UTC
From: Paul Kraemer
Topic: 13064 Message: 13064

Here is a link to the type wire I have found nice to work with for the little splicing coils and radio work in general.
This wire is commonly found in the jewelry making crafts stores on ebay
Gauges from 14 to 26 readily available and possibly beyond that
I particularly like the workability of this wire plus fact that one can obtain small quantity at reasonable cost.

I have no affiliation with this seller and not recommending one way or other. There are MANY similar stores. This just popped up on a search. Almost without exception the wire sold by most of the stores is made by ARCOR, a US company.

Paul K0UYA

http://www.ebay.com/itm/TINNED-COPPER-WIRE-26GA-SOFT-1-OZ-90-FT-SOLID-COPPER-BEADING-WRAPPING-WIRE-/281075034530?pt=LH_DefaultDomain_0&hash=item417160a9a2#ht_1112wt_912

13065. Re: [DrakeRadio] Drake CC-1 and TC-2

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 13:56:52 UTC
From: Robert Logan
Topic: 13054 Message: 13065

Wayne, just read the heading on your email. Disregard my question.

Sent from my iPhone

On Apr 8, 2013, at 8:09 PM, "k5fex" <oilieone@...> wrote:

Have receive and transmit converters I'd like to sell. Both units purchased as additions to my Drake collection. Just no room at the inn!

Have not operated either unit.

Make offer for either or both pieces. Send email to oilieone@...

Thanks everyone!
73
Wayne
K5FEX

[Non-text portions of this message have been removed]

13066. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 14:24:55 UTC
From: Bob Carter
Topic: 13022 Message: 13066

I have a jig using a sewing machine motor and mandril. It will make a foot at a time. Just cut off the length you need and solder in.
Using for 60 years and never had a failure. Will use my 808 at times when necessary for appearance sake. I will make them for free if any interest.

Bob W7TSS

13067. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 15:25:00 UTC
From: Garey Barrell
Topic: 12538 Message: 13067

Howard -

OK. Check the slide switch on the left side near the back. It MUST
be in the 'forward' position, pulled toward the front.

Remember you have to set the PTO to 7.000 MHz, and then key the
transmitter. ON a separate receiver, you should be able to hear 9.000
MHz, 16 MHz, and 7.000 MHz around V4, and only 7.000 MHz around V6.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Thanks, Garey.
>
> Got the finals cleaned up and back in place--and believe it or not, I didn't destroy the lettering on the tubes.
>
> Checked for carrier at the two tubes you said and there is nothing. I thought it was just the receiver that didn't work but it looks like both transmitter and receiver.
>
> Is there a next step--other than box it up to send away, hi hi?
>
> Getting the cage back on was tuff. The XYL put the screws in for me. My fingers just wouldn't go in where one of those screws had to go.
>
> 73 and thanks.
> Howard, WA9RYF
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, April 06, 2013 2:30 PM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>
> Howard -
>
> You really need a CD... :-) Pulling the finals is no big deal. Just
> becareful when you remove the top cap and swing them carefully out of
> the way. Inspect the solder connections to the RF Choke 'post' that
> they all connect to to make sure they don't crack when you finish and

> have the caps back on the tubes. All three tubes are the same, so it
> doesn't matter which order they are in. Remember the power is off and
> the Power Supply is disconnected.
>
> There are four tubesin a rectangle just in front of the PA cage, along
> the side of the chassis. Looking down from the top, with the front
> panel 'to' you, V6 is the top right tube of the group, and V4 is the
> lower left tube. V4 is the Mixer and V6 is the Driver for the PA.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
> > Thanks Gary.
> > Finally got the XYL down there to help get the bias set correctly.
> >
> > Now, I'd like to put the final cage back on before I have a problem. That's gonna be tuff because one of those screws goes where my fingers won't fit. Maybe another job for the XYL. But, before I put the cage back, I'd like to clean the dust and crud off the finals. XYL suggests we keep track of the numbers, etc., and write them back on with a marking pencil. What does anybody think?
> >
> > Gary, you mentioned to check signal at v4 and v6. Wonder ifyou can describe how to find those tubes--with my eyes shut.
> >
> >
> > Thanks,
> > Howard
> > v
> > ----- Original Message -----
> > From: Garey Barrell
> > To: DrakeRadio@yahoogroups.com
> > Sent: Saturday, March 30, 2013 10:57 AM
> > Subject: Re: [DrakeRadio] My non-working TR-4
> >
> >
> >
> >
> > Howard -
> >
> > First, the BIAS should be set for 0.1A, not 1.5A! The idle current
> > should be set to 0.1A.
> >
> > Listening on a separate receiver, can you HEAR a signal on 40M when
> > you key the transmitter, even a very weak one.
> >
> > Using your external receiver with a little sample loop for an antenna,

> > put the loop near V4 and see if you can hear a 7.000 MHz signal with
> > the PTO of the TR-4 set to 000. This would be in TUNE mode, -x on the
> > SIDEBAND switch. If you can, see if it's stronger at V6. Keep an eye
> > on the PLATE meter to make sure the plate current doesn't jump up
> > during this test.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Howard Traxler wrote:
> > > Thanks Garey, for the encouragement. I did take off the final cage (4 screws and 2 shafts) and the protection lamp shows close to 0 ohms. I think that means it's OK. I'd sure like to clean the dust off of those finals. It must be 1/16" thick and sure smells when they start to get warm.
> > >
> > > Yes, (Got the XYL to take a look) when I key the PTT I was getting 100ma (I think that's what the 1 on the meter indicates). I set the bias down a bit so I'm now getting abut 150. I think that's what the mark between the 1 and 2 is for.
> > >
> > > Seems like I must be losing signal at an RF or mixer stage. What can I check next.
> > >
> > > Thank you very much for your suggestions. I sure hope I can get this one working without sending it away.
> > >
> > > Thanks and 73,
> > > de
> > > Howard, WA9RYF
> > > ----- Original Message -----
> > > From: Garey Barrell
> > > To: DrakeRadio@yahoogroups.com
> > > Sent: Sunday, March 24, 2013 10:32 AM
> > > Subject: Re: [DrakeRadio] My non-working TR-4
> > >
> > >
> > >
> > > Howard -
> > >
> > > OK.
> > >
> > > The 9.00 MHz is good, and 'should' be heard on all bands. That is the
> > > Carrier Oscillator. When you switch to CW or AM, it is 'moved' about
> > > 1 kHz lower in frequency.
> > >
> > > The 21.5 MHz is good, and 'should' be heard only on 40M. That is the
> > > Heterodyne Oscillator. It will be different for each band.
> > >

> > > When the PTO is tuned to the '000' point, it should be heard at 5
> > > MHz. This is a tunable oscillator, and so may be a few kHz, (up to
> > > 10,) either side of this frequency.
> > >
> > > The final cage isn't that hard to remove, the TUNE and LOAD shafts
> > > just pull out of the couplers that go through the side, and then
> > > remove the small screws. Obviously power off and power supply unplugged.
> > >
> > > You didn't answer whether you had PA Bias current when you closed the
> > > PTTas described in Section 4, para A in the manual.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > Howard Traxler wrote:
> > > > Hi Garey and thanks. Finally got to check out the local oscilators.
> > > >
> > > > Garey: On 40M the Carrier Oscillator runs at 9.000 MHz,
> > > > Me: I have a carrier at 9 MHz on all bands. It turns off when I switch the mode to AM. There is a microphonic tube near the rear of the radio. Tapping on the tube makes noise on the local oscilator carrier and in the transceiver's speaker.
> > > >
> > > > Garey: the crystal oscillator runs at 21.5 MHz.
> > > > Me: I can hear that one on a radio tuned to 2150 MHz but only when the transceiver is set to 40M. Tuning the xcvr's VFO I get a hetrodyne with the 2150 MHz carrierat about five turns from the clockwise end limit.
> > > >
> > > > I hope I can assume that the protection lamp is OK. It looks like a real chore to get the final cage off of there. A job for the XYL to help with if it really has to be done.
> > > >
> > > > Further suggestions, please? Thank you.
> > > >
> > > > Howard, WA9RYF
> > > >
> > > >
> > > >
> > > >
> > > > ----- Original Message -----
> > > > From: Garey Barrell
> > > > To: DrakeRadio@yahoogroups.com
> > > > Sent: Wednesday, March 13, 2013 11:53 AM
> > > > Subject: Re: [DrakeRadio] My non-working TR-4
> > > >
> > > >
> > > >

> > > > On 40M the Carrier Oscillator runs at 9.000 MHz, the PTO covers 5.455 t0 4.955 MHz from 0-500, and
> > > > the crystal oscillator runs at 21.5 MHz.
> > > >
> > > > Yes, only PA tubes inside the cage.
> > > >
> > > > Don't remove tubes from sockets, just rock them back and forth a little one at a time.
> > > >
> > > > Yes, the bulb is inside the cage, on top of the chassis. It's round about 1/4" in dia.
> > > >
> > > > 73, Garey - K4OAH
> > > > Glen Allen, VA
> > > >
> > > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > > and TR-4/C Service Supplement CDs
> > > > <www.k4oah.com>
> > > >
> > > > Howard Traxler wrote:
> > > > > Yeh, I tried the switch a few times. I'm thinking that moving that switch back and forth should change some reading or continuity across the so-239 or maybe one or both of those rca jacks on the back I could check.
> > > > >
> > > > > Are the three finals the only tubes in the final cage?
> > > > >
> > > > > It's hard to physically check all the tubes. There are so many I get confused.
> > > > >
> > > > > Would that protection bulb be inside the cage with the finals?
> > > > >
> > > > > What frequency can I listen to to hear local oscilators from the receiver?
> > > > >
> > > > > These answers will give me something to do a while. Thanks to you and Don.
> > > > >
> > > > > 73, WA9RYF
> > > > > ----- Original Message -----
> > > > > From: Garey Barrell
> > > > > To: DrakeRadio@yahoogroups.com
> > > > > Sent: Wednesday, March 13, 2013 9:57 AM
> > > > > Subject: Re: [DrakeRadio] My non-working TR-4
> > > > >
> > > > >
> > > > >
> > > > > Howard -
> > > > >
> > > > > That's a #12 bulb. Available from several of the on-line bulb dealers. Electrically identical to a
> > > > > #47 bulb, just with a bi-pin base.
> > > > >
> > > > > Hardly EVER see a bad bulb, usually corrosion on the pins or the socket. DeoxIT

should clear up the
> > > > > problem if that is the cause.
> > > > >
> > > > > You CAN short it out, certainly for test purposes, and probably on a permanent basis unless you run
> > > > > the radio mobile. It's there to protect the receiver front end IF when operating mobile you pull
> > > > > up alongside a 500W CB in a truck. Unless you have multiple antennas at home, and operatemultiple
> > > > > rigs with ALL connected to their own antenna, the bulb isn't necessary.
> > > > >
> > > > > I assume it wasn't the slide switch on the side.?
> > > > >
> > > > > Do you have PA idle current when PTT is closed?
> > > > >
> > > > > Next would be to verify that all tubes are 'lit', and then 'rock' each tube in it's socket a few
> > > > > times. Not the PA tubes.
> > > > >
> > >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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>

13068. Re: Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 16:12:53 UTC
From: w7jpg
Topic: 13022 Message: 13068

These little coils caught my interest when I first heard about them so I did quite a bit of research. I made a Q&D mandrel using miniature tubing (to hold the end of the wire) acquired at a model hobby shop and a stiff coil former (miniature drill bit) sized to wind a coil that would accommodate two 1/2 watt resistor leads. Both are inserted in a small vice vertically. Wire is inserted into end of tubing and wound tightly around the drill bit to an appropriate length. Works pretty well and doesn't take too long to turn out a dozen.

I gathered a number of nuggets of wisdom off the web on the subject component replacement including pictures of several alternative ways of forming Quigs, a presentation Al Klase put together about restoration techniques that includes a section on Quigs, etc. If anyone is interested in reading /seeing this stuff, drop me an email direct. Later tonight I will (again) attempt to put these items in a file on this site.

73,
Chris
W7JGP

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
>
> A 'discussion' has been going on over on that 'other' reflector (The
> "C" word) regarding the 'proper' procedure for replacing a component
> in one of our babies.
>
> Several are touting the little Sprague coils (I forget the name,
> 'quigs?') that aretinned andfluxed. You cut the old component out,
> slip the 'coil' over the cutoff lead and poke the 'new' part lead
> intothe other end of the 'coil' andheat. Of course, most use a
> soldering ironbut I believe I recall back when they were being
> included in each package of caps from Sprague, that the instructions
> said it was as simple as heating it with a match or lighter!!. The
> idea is that you don't have to clean out a terminal strip and unwrap a
> wire to get the old one out. This led into solder removal techniques,
> Solda-Pults, braid and my favorite, the Hakko 808 solder sucker. The
> Hakko will clean solder out/off of anything smaller than abicycle
> frame, making it simple to merely unwrap the wire with a soldering aid
> tool. (Pointy end / bifurcated end.)
>
> Drake had a 'better idea', just an eyelet filled with solder in a
> board, heat the eyelet, pull out the old lead and poke in a new one! :-)
>
> Eventually it got into the 'Art wouldn't have approved' discussion
> (you DO know that each sealed PTO has air in it that was breathed by
> Art don't you)?
>
> --

>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

13069. Re: [DrakeRadio] Digest Number 1941

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 16:56:21 UTC
From: hpolkscw
Topic: 13069 Message: 13069

On Apr 8, 2013, at 10:43 PM, DrakeRadio@yahoogroups.com wrote:

> Couple of questions you or someone else may be able to answer.
>
> 1. Do the pass transistor covers just pry off?
>
> 2. Someone mentioned 'better' transistors?
>
> 3 Does the SCR typically fail when tripped?
>
> Any other tips, hints??
>
> 73, Garey - K4OAH
> Glen Allen, VA

Hi Gary
I just went through the repair of my PS-7 recently and it is now working fine.
The hour meter I have connected since new shows nearly 7000 hours of operation before the failure.
My PS-7 had one shorted pass transistor and the SCR showed low resistance so all were replaced.
The schematic shows 2N5301 transistors and we put 2N5886 as replacements.
The voltage and current parameters are much higher in the 2N5886 so they should last a lot longer and they were readily available.
The SCR did not fail on tripping but was marginal for continued usage.

BTW there are two schematics out there for the supply.
Drake move a few parts from and to the control board.
The serial number of mine is 3670.
If I remember correctly Drake made quite a few changes in the radio at serial 4000 so the PS may have also changed at that number.

73
Harold
N3HP

13070. Re: [DrakeRadio] Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 17:10:37 UTC
From: Richard Knoppow
Topic: 787 Message: 13070

----- Original Message -----
From: "va3ag" <va3ag@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 09, 2013 12:31 AM
Subject: [DrakeRadio] Re: TR-4C

> Thanks for the advise Richard, I will try what you
> suggested about the mic connections and the cleaning. I
> have never cleaned a radio before and I do not like using
> water to clean electronic equipment but everyone seems to
> suggest what you are suggesting so I will give it a try. I
> need to get rid of the cigarette smoke smell. Again Thanks
> for the advise Richard.
>
> 73
>
> Aldo VA3AG

Getting rid of cigarette smoke is one of the things
everyone seems to have a different opinion about. Some
cleaners, like household ammonia, will get it off but may
damage parts unless very thorougly rinsed off.
Most electronic equipment can be washed provided parts
like meters are removed first. After washing the unit
should be baked out in a dry oven at about 130F for at least
48 hours. The method we used at Hewlett-Packard long ago
was to wash out instruments using a paint spray gun loaded
with water and dishwashing detergent. Then it was rinsed
with a hose and then blown out with compressed air and baked
dry. Not sure you need anything as extreme for the Drake.
You must be careful of washing anything with paper parts
because the water may damage or even dissolve the paper.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13071. Drake AC4R back in stock

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 17:39:40 UTC
From: qrper
Topic: 13071 Message: 13071

boys and girls,

I have yet to update my website but I'm selling the AC4R kits again.

Price will remain the same for a while, shipping went up two bucks.

$65 +$8 shipping

contact me off list if you'd like one

mike wb8vge

13072. My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 17:48:50 UTC
From: Howard Traxler
Topic: 12538 Message: 13072

Garey,

Further results from testing:
3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load

R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic connection. Not enough output to register on my relative power out squawker (I use for tuning).

TR-4 still doesn't receive when connected to antenna.

There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.

Thanks, Garey

73
Howard, WA9RYF

13073. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 18:17:12 UTC
From: Garey Barrell
Topic: 12538 Message: 13073

Howard -

I have several of these 'projects' going. Need to refresh a couple of things.

Are you able to set the PA idle current to 0.1A?

Under test conditions:

7.000 MHz
Mode SSB
LSB
RF TUNE around 12 o'clock +/- 2 (adjust for peak)
GAIN 0
PTT closed
KEY either unplugged or closed
PLATE and LOAD adjust for peak.

Plate current should show 0.1A (idle current)

Increase GAIN while 'watching' PLATE current. Signal strength should increase with GAIN, and PLATE current should be 'dipped' with PLATE control.

IF PLATE current does NOT increase whenGAIN is increased we have a problem. If PLATE current increases but output does NOT, then check your power meter!

The slide switch on the rear panel only dims the panel lamps for night-time / mobile use.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> Garey,
>
> Further results from testing:
> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load
>
> R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic

connection. Not enough output to register on my relative power out squawker (I use for tuning).
>
> TR-4 still doesn't receive when connected to antenna.
>
> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>
> Thanks, Garey
>
> 73
> Howard, WA9RYF
>
>
>
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> Yahoo! Groups Links
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13074. Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 21:20:35 UTC
From: va3ag
Topic: 787 Message: 13074

```
--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "va3ag" <va3ag@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, April 09, 2013 12:31 AM
> Subject: [DrakeRadio] Re: TR-4C
>
>
> > Thanks for the advise Richard, I will try what you
> > suggested about the mic connections and the cleaning. I
> > have never cleaned a radio before and I do not like using
> > water to clean electronic equipment but everyone seems to
> > suggest what you are suggesting so I will give it a try. I
> > need to get rid of the cigarette smoke smell. Again Thanks
> > for the advise Richard.
> >
> > 73
> >
> > Aldo VA3AG
>
> Getting rid of cigarette smoke is one of the things
> everyone seems to have a different opinion about. Some
> cleaners, like household ammonia, will get it off but may
> damage parts unless very thorougly rinsed off.
> Most electronic equipment can be washed provided parts
> like meters are removed first. After washing the unit
> should be baked out in a dry oven at about 130F for at least
> 48 hours. The method we used at Hewlett-Packard long ago
> was to wash out instruments using a paint spray gun loaded
> with water and dishwashing detergent. Then it was rinsed
> with a hose and then blown out with compressed air and baked
> dry. Not sure you need anything as extreme for the Drake.
> You must be careful of washing anything with paper parts
> because the water may damage or even dissolve the paper.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Ok Richard thanks again for the advise, the more I think about it the more I think I should
```

have someone who is done this before to do it for me. I will decide what I am going to do shortly.
The radio is in working order 175 watts on 40 Meters but it needs some cleaning and painting of the top and bottom of the radio.

73

Aldo VA3AG

13075. Re: [DrakeRadio] Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-09 22:28:37 UTC
From: Richard Knoppow
Topic: 787 Message: 13075

----- Original Message -----
From: "va3ag" <va3ag@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 09, 2013 2:20 PM
Subject: [DrakeRadio] Re: TR-4C

>
I like equipment that looks clean but found that too much cleaning often does damage. For much equipment one can use canned air to blow out loose dirt and alcohol in spray cans along with a variety of small brushes to clean out the chassis without disassembling. Some stuff just won't come off. I restored an RCA AR-88 (look it up if you are not familiar with it, they are not too common). This receiver was made with oil-filled bathtub paper caps. After many years the seals disintegrate and the oil and wax leak out. When I got mine the bottom of the bottom cover, which is a sort of shallow tray, was filled with oil. I washed it out with soap and water and some Kerosene but could not get the wax off except by scraping. The wax evidently had somehow also gotten on the top of the chassis. It was covered with waxy grime that was extremely difficult to remove. I could not find a solvent that would cut it and some began to remove the printing on the chassis. I just cleaned as best I could and left it alone. I tried in small amounts naphtha, disc brake cleaner, acetone, xylol, mineral spirits (AKA Stodard solvent), isopropyl alcohol, denatured alcohol (which is mostly ethyl alcohol), MEK all to no avail. Managed not to damage it. I replaced all the paper caps and it works like a charm. The receiver was designed so that it does not have any electrolytic caps in it. Despite being about seventy years old it hears everything my Drake R4XB does.
Keep me posted on your progress but I think perhaps you should just leave well enough alone.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13076. Re: [DrakeRadio] Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 03:10:35 UTC
From: VE3AX/7
Topic: 787 Message: 13076

Aldo:

Don’t be too afraid of dousing your TR-4C with water. I’ve done three – an R-4, a T-4X and a TR-4C – and all turned out just fine. Believe me, it was not my 1st choice, but the smoke residue on these three rigs was so bad I really did not have a choice. Ordinarily, I do the judicious clean up with cotton swabs, small brushes, a bit of 99%+ isopropyl alchohol, lots of soft cloths, and maybe a bit of Windex. But sometimes you just have to break out the hose!

What I did was this – remove the knobs, front panel, dial plastic, meter, the PA cage (or at least the top of it), the T/R relay, and the PTO (3 wires to unsolder – mark connections). Pull all the tubes but mark which ones go where. On the TR-4C you don’t need to worry about a transformer but you would have to plug the wire hole with putty on an R-4x xformer. I have used both regular Fantastic (not the kind with bleach!) and Simple Green – both work fine. I did not lose any chassis lettering except when I tried a steam cleaner – that thing I took back to the store. Some of the gurus on the Hallicrafters group have recommended “Scrubbing Bubbles” which I have yet to try but I have some here which I may try soon on an SR-400. Just rinse well with light water pressure from the hose. Apply twice if necessary.

I did not use the oven on the TR-4C to dry it out but did on the R-4/T4X – set at 150 deg F for several hours. On the TR-4C I used direct sunlight outdoors on a windy, dry day. Both drying methods worked fine. I also left the rigs for 2 or 3 days before re-assembly. Do the usual cleaning of switches and relay with a bit of De-Oxit, and pots with a bit of Faderlube. You may want to check the lube on the variable cap shafts in the PA to make sure they are still OK.

You will probably need to disassemble the dial/gear mechanism to clean properly – not for the faint of heart! Tough doing the 1st one. Take pictures or draw it out as you disassemble. Lay it all out on a large white cloth. Be very careful not to lose the little brass rivets. I try to get as much of the old red grease out of the ball bearing assembly in the front of the PTO with long “Q-tips” and isopropyl. Then re-grease the bearings with a small amount of white lithium. I clean the threaded rod with iso as well the same way and place a drop or two of very light machine oil (check your wife’s sewing machine!) on there and run it back and forth a few times. Do NOT lube the plastic gears!!!!! Clean them all and I usually run a bit of rolled up very fine sandpaper through the centre shaft holes just to make sure they are smooth. Check the brass shaft for burrs as well – smooth with a bit of 600 grit or higher emery paper as needed. Re-assemble – you DID take pics didn’t you! Windex works fine on the dials and doesn’t remove the lettering. Getting the dials aligned again is tricky the 1st time – think it may be described on Ron’s web page – www.wb4hfn.com. You will need a signal source.

Front panel will clean up fine with Fantastic – make sure you rinse with water afterwards. Watch the screwdriver doesn’t slip when putting the corner screws back in. Knobs will need a clean and polish – Brasso works for the latter but I am sure others have alternates. I use acrylic white paint available at artist’s supply stores to re-white the lines on the

knobs. Takes some practice but works well for me.

Good luck – takes some effort but nice rig when it's all done.

73

Peter
VE3AX/7

From: va3ag
Sent: Tuesday, April 09, 2013 2:20 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: TR-4C

--- In mailto:DrakeRadio%40yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "va3ag" <va3ag@...>
> To: <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Tuesday, April 09, 2013 12:31 AM
> Subject: [DrakeRadio] Re: TR-4C
>
>
> > Thanks for the advise Richard, I will try what you
> > suggested about the mic connections and the cleaning. I
> > have never cleaned a radio before and I do not like using
> > water to clean electronic equipment but everyone seems to
> > suggest what you are suggesting so I will give it a try. I
> > need to get rid of the cigarette smoke smell. Again Thanks
> > for the advise Richard.
> >
> > 73
> >
> > Aldo VA3AG
>
> Getting rid of cigarette smoke is one of the things
> everyone seems to have a different opinion about. Some
> cleaners, like household ammonia, will get it off but may
> damage parts unless very thorougly rinsed off.
> Most electronic equipment can be washed provided parts
> like meters are removed first. After washing the unit
> should be baked out in a dry oven at about 130F for at least
> 48 hours. The method we used at Hewlett-Packard long ago
> was to wash out instruments using a paint spray gun loaded
> with water and dishwashing detergent. Then it was rinsed
> with a hose and then blown out with compressed air and baked
> dry. Not sure you need anything as extreme for the Drake.
> You must be careful of washing anything with paper parts
> because the water may damage or even dissolve the paper.
>
>

> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
Ok Richard thanks again for the advise, the more I think about it the more I think I should have someone who is done this before to do it for me. I will decide what I am going to do shortly.
The radio is in working order 175 watts on 40 Meters but it needs some cleaning and painting of the top and bottom of the radio.

73

Aldo VA3AG

[Non-text portions of this message have been removed]

13077. Re: [DrakeRadio] Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 04:54:13 UTC
From: Richard Knoppow
Topic: 787 Message: 13077

----- Original Message -----
From: "VE3AX/7" <ve3ax@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 09, 2013 8:10 PM
Subject: Re: [DrakeRadio] Re: TR-4C

Aldo:

If you take the front panel off beware that there are fiber washer spacers between the panel and chassis at each screw. Take it apart in a shallow box or tray so that these small parts don't get lost. While the Drake stuff is not built quite the same way as old Hewlett-Packard instruments were but its not that different and I washed a couple of hundred instruments there. Rinse off using a hose and warm water, wash using a paint spray gun loaded with warm, diluted dishwashing detergent, rinse again using the hose and warm water, blow out with compressed air to remove as much moisture as possible, bake out in an oven at about 130F. This is high enough to evaporate the moisture but not hot enough to damage most components. Anything not waterproof must be removed, mostly meters and anything made of paper.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13078. TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 05:18:49 UTC
From: ka8asn
Topic: 13078 Message: 13078

I had to replace my regulator pot on my power supply board on my TR7 because it was real bad. Found it by accident. But it was interesting! Now the problem I seem to have is after getting the DC 10 volts set at 10.00 VDC on the parent board and replacing the 8.05 crystal on the PBT board, I have found either I have a bad frequency counter, BTW its a Fluke7261A, works fairly well with all my other stuff, I have found that the adjustment for C1030 does absoulty nothing. I set the 40 Mhz oscilator, and the to 40 mhz exatly,and that appears to work ok but when I go to set the 5.645 oscilator the close as i can get is 5.640 MHZ Do I need to change the capacitor also and what value should I use.And when I set the pots on the power supply board according to the service manual,the receiver sounds bad and the transmitter is off frequency and the last digit on my numerical display blinks and if I leave the receiver alone it will drift off about one to 3kc normally. The drift problem might be the pin diodes but have not got that far yet. I did the intinal adjustment using WWV and the receiver appears to work better> Transmitt have not yet had a chance to check.So either I have a bad frequency counter? Or jinks, or murphy has me, I am confused and would like some help? What is the best way to set the 40 Mhz Oscillator, The 13.695 and 8.05 crystal frequency and hopefully come up with the 63.950 output frequency. And then set the frequency Pots on the Power supply board? I may have some other things happening I am not aware of so any pointers would be appreciated.

Mike KA8ASN

13079. Re: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 05:54:41 UTC
From: Jim Shorney
Topic: 13078 Message: 13079

Mike,

It does take a fairly sensitive counter to align the TR-7. I've found that the 40 MHz will shift *slightly* due to cable capacitance, but not enough to be of concern to most people. Still, I prefer to decouple the cable with a small value carbon resistor (220 to 470 Ohms, the highest value I can use that provides a stable reading on the counter) at the probe tip to minimize this. Otherwise, align it exactly as the service manual says and it will be correct.

If you can get the 40, 8.05, and 13.695 (steps 3-3 through 3-5) adjusted correctly, the passband pots on the PS board should fall right into place. All they do is vary the 13.695 with relation to the others. You must do all three steps in the proper sequence! And the Passband Tuning must be set to ON and the front panel control set to center for adjustment of the 13.695 and 8.05, but OFF for the fixed passband pots. This is critical! If C1030 is not working, look for solder bridges or open connections. This type of capacitor rarely fails.

Bad PIN diodes will not cause drift. They are in the antenna circiuts. If you have another sensitive receiver that can monitor the 40. 13.695, 8.05, and the PTO, that will tell you where your drift is coming from. FWIW, I've never seen bad PIN doides, but lots of people seem to want to blame every ill on them. :)

While you were working on the power supply board, did you replace the large electrolytic capacitor? If not, do so before you do anything else. It is likely not related to your problem, but I consider it an "always replace" part. These caps are getting old and are starting to fail, and this one is particularly critical to proper operation of the rig. Strange things can happen when it starts to fail.

Again, the best way to align the oscillators is to follow the steps in the service manual, exactly and in order, without skipping anything. You don't need to go past 3.6 if the rest of the rig seems to be operating properly. I've never had to touch the VCO or translator. Everything following should be OK unless the rig has been "fiddled" with. The CW oscillator may need some extra love if you are a CW op, but that's covered in an article on the WB4HFN web site.

73 es GL,

-Jim
NU0C

On Wed, 10 Apr 2013 05:18:49 -0000, ka8asn wrote:

>I had to replace my regulator pot on my power supply board on my TR7 because it was real bad. Found it by accident. But it was interesting! Now the problem I seem to have is after

getting the DC 10 volts set at 10.00 VDC on the parent board and replacing the 8.05 crystal on the PBT board, I have found either I have a bad frequency counter, BTW its a Fluke7261A, works fairly well with all my other stuff, I have found that the adjustment for C1030 does absoulty nothing. I set the 40 Mhz oscilator, and the to 40 mhz exatly,and that appears to work ok but when I go to set the 5.645 oscilator the close as i can get is 5.640 MHZ Do I need to change the capacitor also and what value should I use.And when I set the pots on the power supply board according to the service manual,the receiver sounds bad and the transmitter is off frequency and the last digit on my numerical display blinks and if I leave the receiver alone it will drift off about one to 3kc normally. The drift problem might be the pin diodes but have not got that far yet. I did the intinal adjustment using WWV and the receiver appears to work better> Transmitt have not yet had a chance to check.So either I have a bad frequency counter? Or jinks, or murphy has me, I am confused and would like some help? What is the best way to set the 40 Mhz Oscillator, The 13.695 and 8.05 crystal frequency and hopefully come up with the 63.950 output frequency. And then set the frequency Pots on the Power supply board? I may have some other things happening I am not aware of so any pointers would be appreciated.
>
>Mike KA8ASN
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13080. Good Grief!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 14:35:42 UTC
From: Garey Barrell
Topic: 13080 Message: 13080

Talk about frustration..........

I'm trying to order a few parts to repair my PS-7 power supply.

2N5302 (4)

C288F3/NTE5562 (1)

8A ABC (5)

Shouldn't be too difficult, right? All are readily available.

The problem is, NO supplier has all three, requiring two or three separate orders, with of course a $6-12 shipping charge! Shipping is more than the cost of the parts.

Also, when did 1/4 x 1-1/4 fuses start costing over $1 EACH. Last time I bought them, they were less than $1 for a box of 5!!

I knew this Ryder truck full of parts I've been moving around with me was worth it. Of course none of the 10,000 parts (at least) that I have are any of the above!

Rats!

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13081. Re: [DrakeRadio] Good Grief!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 16:49:18 UTC
From: Steve Wedge
Topic: 13080 Message: 13081

Murphy's Law, Garey.

Steve Wedge, W1ES/7
On the runway in LAS

Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Apr 10, 2013, at 7:35 AM, Garey Barrell <k4oah@...> wrote:

>
> Talk about frustration..........
>
> I'm trying to order a few parts to repair my PS-7 power supply.
>
> 2N5302 (4)
>
> C288F3/NTE5562 (1)
>
> 8A ABC (5)
>
> Shouldn't be too difficult, right? All are readily available.
>
> The problem is, NO supplier has all three, requiring two or three
> separate orders, with of course a $6-12 shipping charge! Shipping is
> more than the cost of the parts.
>
> Also, when did 1/4 x 1-1/4 fuses start costing over $1 EACH. Last
> time I bought them, they were less than $1 for a box of 5!!
>
> I knew this Ryder truck full of parts I've been moving around with me
> was worth it. Of course none of the 10,000 parts (at least) that I
> have are any of the above!
>
> Rats!
>
> --
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>

[Non-text portions of this message have been removed]

13082. RE: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 18:32:43 UTC
From: Michael J Trussell
Topic: 13078 Message: 13082

Thank you Jim, for you help. I going to try it again today and see what happens. I don't know if radio shack have those capacitors but will check. It's so hard to find any electronic parts in this town due to the fact that General Motors pulled out of Flint years ago. Just to replace my soldering gun tip I had to order it and it took 5 days to get here at very inflated cost. So I will let you know what happens.

Thank You

Michael J Trussell

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Jim Shorney
Sent: Wednesday, April 10, 2013 1:55 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR7 Alignment

Mike,

It does take a fairly sensitive counter to align the TR-7. I've found that the
40 MHz will shift *slightly* due to cable capacitance, but not enough to be of
concern to most people. Still, I prefer to decouple the cable with a small value carbon resistor (220 to 470 Ohms, the highest value I can use that provides a stable reading on the counter) at the probe tip to minimize this. Otherwise, align it exactly as the service manual says and it will be correct.

If you can get the 40, 8.05, and 13.695 (steps 3-3 through 3-5) adjusted correctly, the passband pots on the PS board should fall right into place. All
they do is vary the 13.695 with relation to the others. You must do all three
steps in the proper sequence! And the Passband Tuning must be set to ON and the
front panel control set to center for adjustment of the 13.695 and 8.05, but OFF for the fixed passband pots. This is critical! If C1030 is not working, look for solder bridges or open connections. This type of capacitor rarely fails.

Bad PIN diodes will not cause drift. They are in the antenna circiuts. If you
have another sensitive receiver that can monitor the 40. 13.695, 8.05, and the
PTO, that will tell you where your drift is coming from. FWIW, I've never seen

bad PIN doides, but lots of people seem to want to blame every ill on them.
:)

While you were working on the power supply board, did you replace the large electrolytic capacitor? If not, do so before you do anything else. It is likely
not related to your problem, but I consider it an "always replace" part. These
caps are getting old and are starting to fail, and this one is particularly critical to proper operation of the rig. Strange things can happen when it starts to fail.

Again, the best way to align the oscillators is to follow the steps in the service manual, exactly and in order, without skipping anything. You don't need
to go past 3.6 if the rest of the rig seems to be operating properly. I've never had to touch the VCO or translator. Everything following should be OK unless the rig has been "fiddled" with. The CW oscillator may need some extra
love if you are a CW op, but that's covered in an article on the WB4HFN web site.

73 es GL,

-Jim
NU0C

On Wed, 10 Apr 2013 05:18:49 -0000, ka8asn wrote:

>I had to replace my regulator pot on my power supply board on my TR7 because it was real bad. Found it by accident. But it was interesting! Now the problem I seem to have is after getting the DC 10 volts set at 10.00 VDC on the parent board and replacing the 8.05 crystal on the PBT board, I have found either I have a bad frequency counter, BTW its a Fluke7261A, works fairly well with all my other stuff, I have found that the adjustment for C1030 does absoulty nothing. I set the 40 Mhz oscillator, and the to 40 mhz exatly,and that appears to work ok but when I go to set the 5.645 oscillator the close as i can get is 5.640 MHZ Do I need to change the capacitor also and what value should I use.And when I set the pots on the power supply board according to the service manual, the receiver sounds bad and the transmitter is off frequency and the last digit on my numerical display blinks and if I leave the receiver alone it will drift off about one to 3kc normally. The drift problem might be the pin diodes but have not got that far yet. I did the intinal adjustment using WWV and the receiver appears to work better> Transmit have not yet had a chance to check. So either I have a bad frequency counter? Or jinks, or Murphy has me, I am confused and would like some help? What is the best way to set the 40 Mhz Oscillator, The 13.695 and 8.05 crystal frequency and hopefully come up with the 63.950 output frequency. And then set the frequency Pots on the Power supply board? I may have some other things happening I am not aware of so any pointers would be appreciated.
>

>Mike KA8ASN
>
>

--
"There's something out of place - let's go and poke it with a stick." - The Doctor, "Amy's Choice"

[Non-text portions of this message have been removed]

13083. Re: [DrakeRadio] Good Grief!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 19:44:43 UTC
From: Gary Woods
Topic: 13080 Message: 13083

On Wed, 10 Apr 2013 10:35:42 -0400, you wrote:

>I'm trying to order a few parts to repair my PS-7 power supply.
>
>2N5302 (4)
>
>C288F3/NTE5562 (1)

American Microsemiconductor has these, though I couldn't find the ABC-8 fuses.... perhaps a glass rather than ceramic package (I think that's what they are). I've been happy with their service for "legacy" parts.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

13084. Re: [DrakeRadio] Good Grief!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 21:05:32 UTC
From: Garey Barrell
Topic: 13080 Message: 13084

Gary -

Yes, I've dealt with AMS in the past. They had the 2N5302, but they were $12 each v. $3.76 from Mouser and Digi. I couldn't find the SCR either, under the original C288F3 or NTE5562.

Another list member suggested eBay for the fuses, and sure enough, got 10 fuses with free shipping for $5.xx something. The glass body 3AG type in 8A is only rated for 32V, the ceramic ABC type is rated for 250V.

So I looked for the NTE 5562 and up came the ECG 5562 which is the same as the NTE 5562 for $11, which is about half the 'normal' price, again free shipping. Has a photo of it with hardware in package, so worth a chance.

So all I have to do is order the 2N5302s from Mouser or Digi, same price. The ones on eBay are either from China or more expensive than the ones from Mouser. I don't trust China for semiconductors, too many counterfeitsfloating around.

I got the Hakko out and am in the process of removing the 2N5301s, the first two out were shorted.

The capacitors look good, and allcheck very low ESR, so going to leave them.

Thanks to all for the suggested sources.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Gary Woods wrote:
> On Wed, 10 Apr 2013 10:35:42 -0400, you wrote:
>
>> I'm trying to order a few parts to repair my PS-7 power supply.
>>
>> 2N5302 (4)
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> American Microsemiconductor has these, though I couldn't find the ABC-8
> fuses.... perhaps a glass rather than ceramic package (I think that's what
> they are). I've been happy with their service for "legacy" parts.
>

13085. Re: [DrakeRadio] Good Grief!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 21:08:26 UTC
From: Garey Barrell
Topic: 13080 Message: 13085

Gary -

Oops, take it back. AMS DOES have the NTE5562, I forgot you have to
search with just the number. But they are $19 each.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Gary Woods wrote:
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>
>> I'm trying to order a few parts to repair my PS-7 power supply.
>>
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> American Microsemiconductor has these, though I couldn't find the ABC-8
> fuses.... perhaps a glass rather than ceramic package (I think that's what
> they are). I've been happy with their service for "legacy" parts.
>

13086. TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 21:58:24 UTC
From: v44kai@...
Topic: 13086 Message: 13086

Hi all on the group,
I got home this afternoon from work, got in the shack and turned on my ts-940, the TR-7A was on and receiving very well a couple friends were on chatting, I the 940 came on, suddenly the TR-7A started with with a squealing, and didn't stop squealing as it had a feedback in the speaker,

now, no receiving of the signals it was, I wonder if for a brief moment when the 940 came on, it might have transmitted briefly as it was in vox from its last used this morning,

The frequency and antennas for both rigs are closet enough.

If I turned up the volume the squealing feedback gets louder, and the S-meter increases with some static in the back ground,

any idea, experience, possible damage, and of which board, I don't have extenders,

For sure it is not receiving even if I transmit closet to its frequency,

Thanks in advanced,

v44kai.....Joel.
What you think guys,

13087. PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 22:13:03 UTC
From: Garey Barrell
Topic: 13087 Message: 13087

OK, got the pass transistors out. Checked each one on the 3^3
Semiconductor analyzer.

1. Dead Short - 4 ohms

2. Thinks it's a diode

3. OK

4. Dead short - 4 ohms.

--

73, Garey - K4OAH
Glen Allen, VA

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<www.k4oah.com>

13088. Re: [DrakeRadio] PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-10 23:34:42 UTC
From: john
Topic: 13087 Message: 13088

Garey

Other than the below, how do they look? :-)

John K5MO

At 06:13 PM 4/10/2013, you wrote:

>OK, got the pass transistors out. Checked each one on the 3^3
>Semiconductor analyzer.
>
>1. Dead Short - 4 ohms
>
>2. Thinks it's a diode
>
>3. OK
>
>4. Dead short - 4 ohms.
>
>
>--
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>
>
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>
>Yahoo! Groups Links
>
>
>

13089. Re: [DrakeRadio] Re: TR-4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 00:45:19 UTC
From: David Winfree
Topic: 787 Message: 13089

I did the same process on my T4X, but used full strength krud kutter. The knobs are not quite as glossy as others I've seen, so proceed with caution there. Dial is just fine, but get the meter out of the equation. I did the PTO, and it doesn't drift at all now. The cigarette tar just lifted off, no scrubbing at all. Garden hose, outside and a few day back out did the trick. Relube the mechanicals, good to go.

On Tue, Apr 9, 2013 at 11:10 PM, VE3AX/7 <ve3ax@...> wrote:

> **
>
>
> Aldo:
>
> Don?t be too afraid of dousing your TR-4C with water. I?ve done three ? an
> R-4, a T-4X and a TR-4C ? and all turned out just fine. Believe me, it was
> not my 1st choice, but the smoke residue on these three rigs was so bad I
> really did not have a choice. Ordinarily, I do the judicious clean up with
> cotton swabs, small brushes, a bit of 99%+ isopropyl alchohol, lots of soft
> cloths, and maybe a bit of Windex. But sometimes you just have to break out
> the hose!
>
> What I did was this ? remove the knobs, front panel, dial plastic, meter,
> the PA cage (or at least the top of it), the T/R relay, and the PTO (3
> wires to unsolder ? mark connections). Pull all the tubes but mark which
> ones go where. On the TR-4C you don?t need to worry about a transformer but
> you would have to plug the wire hole with putty on an R-4x xformer. I have
> used both regular Fantastic (not the kind with bleach!) and Simple Green ?
> both work fine. I did not lose any chassis lettering except when I tried a
> steam cleaner ? that thing I took back to the store. Some of the gurus on
> the Hallicrafters group have recommended ?Scrubbing Bubbles? which I have
> yet to try but I have some here which I may try soon on an SR-400. Just
> rinse well with light water pressure from the hose. Apply twice if
> necessary.
>
> I did not use the oven on the TR-4C to dry it out but did on the R-4/T4X ?
> set at 150 deg F for several hours. On the TR-4C I used direct sunlight
> outdoors on a windy, dry day. Both drying methods worked fine. I also left
> the rigs for 2 or 3 days before re-assembly. Do the usual cleaning of
> switches and relay with a bit of De-Oxit, and pots with a bit of Faderlube.
> You may want to check the lube on the variable cap shafts in the PA to make
> sure they are still OK.
>
> You will probably need to disassemble the dial/gear mechanism to clean
> properly ? not for the faint of heart! Tough doing the 1st one. Take

> pictures or draw it out as you disassemble. Lay it all out on a large white
> cloth. Be very careful not to lose the little brass rivets. I try to get as
> much of the old red grease out of the ball bearing assembly in the front of
> the PTO with long ?Q-tips? and isopropyl. Then re-grease the bearings with
> a small amount of white lithium. I clean the threaded rod with iso as well
> the same way and place a drop or two of very light machine oil (check your
> wife?s sewing machine!) on there and run it back and forth a few times. Do
> NOT lube the plastic gears!!!!! Clean them all and I usually run a bit of
> rolled up very fine sandpaper through the centre shaft holes just to make
> sure they are smooth. Check the brass shaft for burrs as well ? smooth with
> a bit of 600 grit or higher emery paper as needed. Re-assemble ? you DID
> take pics didn?t you! Windex works fine on the dials and doesn?t remove the
> lettering. Getting the dials aligned again is tricky the 1st time ? think
> it may be described on Ron?s web page ? www.wb4hfn.com. You will need a
> signal source.
>
> Front panel will clean up fine with Fantastic ? make sure you rinse with
> water afterwards. Watch the screwdriver doesn?t slip when putting the
> corner screws back in. Knobs will need a clean and polish ? Brasso works
> for the latter but I am sure others have alternates. I use acrylic white
> paint available at artist?s supply stores to re-white the lines on the
> knobs. Takes some practice but works well for me.
>
> Good luck ? takes some effort but nice rig when it?s all done.
>
> 73
>
> Peter
> VE3AX/7
>
> From: va3ag
> Sent: Tuesday, April 09, 2013 2:20 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Re: TR-4C
>
> --- In mailto:DrakeRadio%40yahoogroups.com, "Richard Knoppow" <1oldlens1@...>
> wrote:
> >
> >
> > ----- Original Message -----
> > From: "va3ag" <va3ag@...>
> > To: <mailto:DrakeRadio%40yahoogroups.com>
> > Sent: Tuesday, April 09, 2013 12:31 AM
> > Subject: [DrakeRadio] Re: TR-4C
> > >
> > >
> > > Thanks for the advise Richard, I will try what you
> > > suggested about the mic connections and the cleaning. I
> > > have never cleaned a radio before and I do not like using
> > > water to clean electronic equipment but everyone seems to

> > > suggest what you are suggesting so I will give it a try. I
> > > need to get rid of the cigarette smoke smell. Again Thanks
> > > for the advise Richard.
> > >
> > > 73
> > >
> > > Aldo VA3AG
> >
> > Getting rid of cigarette smoke is one of the things
> > everyone seems to have a different opinion about. Some
> > cleaners, like household ammonia, will get it off but may
> > damage parts unless very thorougly rinsed off.
> > Most electronic equipment can be washed provided parts
> > like meters are removed first. After washing the unit
> > should be baked out in a dry oven at about 130F for at least
> > 48 hours. The method we used at Hewlett-Packard long ago
> > was to wash out instruments using a paint spray gun loaded
> > with water and dishwashing detergent. Then it was rinsed
> > with a hose and then blown out with compressed air and baked
> > dry. Not sure you need anything as extreme for the Drake.
> > You must be careful of washing anything with paper parts
> > because the water may damage or even dissolve the paper.
> >
> >
> > --
> > Richard Knoppow
> > Los Angeles
> > WB6KBL
> > dickburk@...
> >
> Ok Richard thanks again for the advise, the more I think about it the more
> I think I should have someone who is done this before to do it for me. I
> will decide what I am going to do shortly.
> The radio is in working order 175 watts on 40 Meters but it needs some
> cleaning and painting of the top and bottom of the radio.
>
> 73
>
> Aldo VA3AG
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

13090. Re: [DrakeRadio] PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 01:44:11 UTC
From: Garey Barrell
Topic: 13087 Message: 13090

I'll let you know tomorrow!

I'm not looking forward to that SCR. If you've been inside, it's 'wired' in with solid linguini on steroids aluminum. About 1/4" x 1/8"bus bar. I'm going to disconnect what I can without bending anything and get the M^3 on it. If it tests good, it's gonna stay!

I've got to test the TIP-31C tomorrow to make sure its guts haven't been sucked out.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

john wrote:
> Garey
>
> Other than the below, how do they look? :-)
>
> John K5MO
>
>
>
> At 06:13 PM 4/10/2013, you wrote:
>
>> OK, got the pass transistors out. Checked each one on the 3^3
>> Semiconductor analyzer.
>>
>> 1. Dead Short - 4 ohms
>>
>> 2. Thinks it's a diode
>>
>> 3. OK
>>
>> 4. Dead short - 4 ohms.
>>
>>

13091. WTB: Nice Drake TR7 or TR7A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 02:11:37 UTC
From: W7VH
Topic: 13091 Message: 13091

If anyone knows of one that's available,
could you write me directly at jon@...?

Thanks,

Jon
W7VH
541 517-8675

13092. RE: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 03:15:11 UTC
From: Jim Shorney
Topic: 13078 Message: 13092

I will make one correction to what I wrote. After adjustment of the 10V regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings don't seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step 3-2). It's pretty simple, you will need a long small flat-blade screwdriver with an insulated shaft. A small LED flashlight will be useful too.

73

-Jim
NU0C

On Wed, 10 Apr 2013 14:32:43 -0400, Michael J Trussell wrote:

>Thank you Jim, for you help. I going to try it again today and see what
>happens. I don't know if radio shack have those capacitors but will check.
>It's so hard to find any electronic parts in this town due to the fact that
>General Motors pulled out of Flint years ago. Just to replace my soldering
>gun tip I had to order it and it took 5 days to get here at very inflated
>cost. So I will let you know what happens.
>
>
>
>Thank You
>
>Michael J Trussell
>
>
>
>From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
>Behalf Of Jim Shorney
>Sent: Wednesday, April 10, 2013 1:55 AM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] TR7 Alignment
>
>
>
>
>
>
>
>Mike,
>
>It does take a fairly sensitive counter to align the TR-7. I've found that
>the
>40 MHz will shift *slightly* due to cable capacitance, but not enough to be
>of
>concern to most people. Still, I prefer to decouple the cable with a small

>value carbon resistor (220 to 470 Ohms, the highest value I can use that
>provides a stable reading on the counter) at the probe tip to minimize this.
>Otherwise, align it exactly as the service manual says and it will be
>correct.
>
>If you can get the 40, 8.05, and 13.695 (steps 3-3 through 3-5) adjusted
>correctly, the passband pots on the PS board should fall right into place.
>All
>they do is vary the 13.695 with relation to the others. You must do all
>three
>steps in the proper sequence! And the Passband Tuning must be set to ON and
>the
>front panel control set to center for adjustment of the 13.695 and 8.05, but
>OFF for the fixed passband pots. This is critical! If C1030 is not working,
>look for solder bridges or open connections. This type of capacitor rarely
>fails.
>
>Bad PIN diodes will not cause drift. They are in the antenna circiuts. If
>you
>have another sensitive receiver that can monitor the 40. 13.695, 8.05, and
>the
>PTO, that will tell you where your drift is coming from. FWIW, I've never
>seen
>bad PIN doides, but lots of people seem to want to blame every ill on them.
>:)
>
>While you were working on the power supply board, did you replace the large
>electrolytic capacitor? If not, do so before you do anything else. It is
>likely
>not related to your problem, but I consider it an "always replace" part.
>These
>caps are getting old and are starting to fail, and this one is particularly
>critical to proper operation of the rig. Strange things can happen when it
>starts to fail.
>
>Again, the best way to align the oscillators is to follow the steps in the
>service manual, exactly and in order, without skipping anything. You don't
>need
>to go past 3.6 if the rest of the rig seems to be operating properly. I've
>never had to touch the VCO or translator. Everything following should be OK
>unless the rig has been "fiddled" with. The CW oscillator may need some
>extra
>love if you are a CW op, but that's covered in an article on the WB4HFN web
>site.
>
>73 es GL,
>
>-Jim
>NU0C
>

>On Wed, 10 Apr 2013 05:18:49 -0000, ka8asn wrote:
>
>>I had to replace my regulator pot on my power supply board on my TR7
>because it was real bad. Found it by accident. But it was interesting! Now
>the problem I seem to have is after getting the DC 10 volts set at 10.00 VDC
>on the parent board and replacing the 8.05 crystal on the PBT board, I have
>found either I have a bad frequency counter, BTW its a Fluke7261A, works
>fairly well with all my other stuff, I have found that the adjustment for
>C1030 does absoulty nothing. I set the 40 Mhz oscillator, and the to 40 mhz
>exatly,and that appears to work ok but when I go to set the 5.645 oscillator
>the close as i can get is 5.640 MHZ Do I need to change the capacitor also
>and what value should I use.And when I set the pots on the power supply
>board according to the service manual, the receiver sounds bad and the
>transmitter is off frequency and the last digit on my numerical display
>blinks and if I leave the receiver alone it will drift off about one to 3kc
>normally. The drift problem might be the pin diodes but have not got that
>far yet. I did the intinal adjustment using WWV and the receiver appears to
>work better> Transmit have not yet had a chance to check. So either I have a
>bad frequency counter? Or jinks, or Murphy has me, I am confused and would
>like some help? What is the best way to set the 40 Mhz Oscillator, The
>13.695 and 8.05 crystal frequency and hopefully come up with the 63.950
>output frequency. And then set the frequency Pots on the Power supply board?
>I may have some other things happening I am not aware of so any pointers
>would be appreciated.
>>
>>Mike KA8ASN
>>
>>
>
>--
>"There's something out of place - let's go and poke it with a stick." - The
>Doctor, "Amy's Choice"
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13093. Re: [DrakeRadio] TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 03:20:32 UTC
From: Jim Shorney
Topic: 13086 Message: 13093

Tap firmly on the radio in various spots. Does the feedback change? You may have "dirty" Molex connectors. Check the +10T and +10R voltages to ensure they are switching properly. If not, a switching transistor on the exciter PCB may be defective.

73

-Jim
NU0C

On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:

>Hi all on the group,
>I got home this afternoon from work, got in the shack and turned on my ts-940, the TR-7A was on and receiving very well a couple friends were on chatting, I the 940 came on, suddenly the TR-7A started with with a squealing, and didn't stop squealing as it had a feedback in the speaker,
>
>now, no receiving of the signals it was, I wonder if for a brief moment when the 940 came on, it might have transmitted briefly as it was in vox from its last used this morning,
>
>The frequency and antennas for both rigs are closet enough.
>
>If I turned up the volume the squealing feedback gets louder, and the S-meter increases with some static in the back ground,
>
>any idea, experience, possible damage, and of which board, I don't have extenders,
>
>For sure it is not receiving even if I transmit closet to its frequency,
>
>Thanks in advanced,
>
>
>v44kai.....Joel.
>What you think guys,
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13094. MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 13:45:11 UTC
From: Garey Barrell
Topic: 13094 Message: 13094

Congratulations David! You have just become member 1000 of the
DrakeRadio list on Yahoo Groups!

Welcome to the best collection of Drake enthusiasts in the world.

It's been just about one year since this list was 'reborn' and we have
added almost 500 members.

Choose any one of my Drake Service Supplement CDs as my thank you for
being #1000.

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13095. Re: [DrakeRadio] MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 13:51:35 UTC
From: Steve Wedge
Topic: 13094 Message: 13095

Wow. I didn't realise how many folks were in here. Good job!

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Apr 11, 2013, at 6:45 AM, Garey Barrell <k4oah@...> wrote:

>
> Congratulations David! You have just become member 1000 of the
> DrakeRadio list on Yahoo Groups!
>
> Welcome to the best collection of Drake enthusiasts in the world.
>
> It's been just about one year since this list was 'reborn' and we have
> added almost 500 members.
>
> Choose any one of my Drake Service Supplement CDs as my thank you for
> being #1000.
>
> --
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>

[Non-text portions of this message have been removed]

13096. Re: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 13:55:08 UTC
From: Garey Barrell
Topic: 13078 Message: 13096

Is there some technical reason it has to be an LED flashlight??

All I have are MiniMag lights, and they are all _filament_ lamps.

We ARE all vintage vacuum tube here......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> I will make one correction to what I wrote. After adjustment of the 10V
> regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings don't
> seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step 3-2).
> It's pretty simple, you will need a long small flat-blade screwdriver with an
> insulated shaft. A small LED flashlight will be useful too.
>
> 73
>
> -Jim
> NU0C
>
>

13097. Re: PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 14:22:43 UTC
From: hpolkscw
Topic: 13087 Message: 13097

> OK, got the pass transistors out. Checked each one on the 3^3
> Semiconductor analyzer.
>
> 1. Dead Short - 4 ohms
>
> 2. Thinks it's a diode
>
> 3. OK
>
> 4. Dead short - 4 ohms.
>
> --
>
> 73, Garey - K4OAH
> Glen Allen, VA

Gary, yours is in worse shape than mine. I had only one transistor that was shorted.

> I'm not looking forward to that SCR. If you've been inside, it's
> 'wired' in with solid linguini on steroids aluminum. About 1/4" x
> 1/8"bus bar. I'm going to disconnect what I can without bending
> anything and get the M^3 on it. If it tests good, it's gonna stay!

Gary, the SCR will come out but you are right the connection to ground is rather stout, about 8 gauge wire.
You can desolder the wire from the SCR but you will have to bend the wire. Disconnecting it was really not all that bad.
The SCR is connected to the bottom of the PS with a nut on the bottom outside. There are a few wires that are on the bottom of the SCR and are only ground wires from the filter caps as I remember. Getting the SCR out is messy but doable.
Good luck with it
Harold
N3HP

13098. Re: [DrakeRadio] PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 15:42:28 UTC
From: Garey Barrell
Topic: 13087 Message: 13098

I think I found a (the?) problem with the power supply.

On one of the nylon insulators mounting the power transistors to the heat sink, the Emitter lead either melted through the insulator and shorted to the heat sink, or the insulator was either defective or damaged in installation. The insulator has a gap, blackened on the edges, that would have allowed the lead to touch the heat sink. So now I need some insulators! The originals are pretty fancy, with a little handle on the back, etc. Replacements I've been able to find are just a skeleton (+) that should work fine.

This might explain the sizzling sound when it went out.

73, Garey - K4OAH
Glen Allen, VA

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13099. Re: [DrakeRadio] TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 15:48:38 UTC
From: Trevor Liburd
Topic: 13086 Message: 13099

Hi Jim,

Thanks for responding, I just downloaded the SM for the rig, and will look at the schematics, anyhow I to the cover off and realized the PA was getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I also noticed the plugging relay in the antenna compartment, is engaging when I turned the power switch on,

Removing the jumper in the right bottom corner of the PA decreases that current to just a little over 2 Amps,

The plugged in relay doesn't change when the ptt pressed, only the feed back cuts out,

I will get familiar with the circuit operations and see what I can find,

v44kai.....Joel.

On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:

> **
>
>
>
> Tap firmly on the radio in various spots. Does the feedback change? You may
> have "dirty" Molex connectors. Check the +10T and +10R voltages to ensure
> they
> are switching properly. If not, a switching transistor on the exciter PCB
> may
> be defective.
>
> 73
>
> -Jim
> NU0C
>
>
> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@gmail.com wrote:
>
> >Hi all on the group,
> >I got home this afternoon from work, got in the shack and turned on my
> ts-940, the TR-7A was on and receiving very well a couple friends were on
> chatting, I the 940 came on, suddenly the TR-7A started with with a
> squealing, and didn't stop squealing as it had a feedback in the speaker,
> >
> >now, no receiving of the signals it was, I wonder if for a brief moment
> when the 940 came on, it might have transmitted briefly as it was in vox

> from its last used this morning,
> >
> >The frequency and antennas for both rigs are closet enough.
> >
> >If I turned up the volume the squealing feedback gets louder, and the
> S-meter increases with some static in the back ground,
> >
> >any idea, experience, possible damage, and of which board, I don't have
> extenders,
> >
> >For sure it is not receiving even if I transmit closet to its frequency,
> >
> >Thanks in advanced,
> >
> >
> >v44kai.....Joel.
> >What you think guys,
> >
> >
>
> --
> ?There?s something out of place ? let?s go and poke it with a stick.? ?
> The Doctor, "Amy?s Choice"
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13100. Re: [DrakeRadio] TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 15:55:50 UTC
From: Garey Barrell
Topic: 13086 Message: 13100

Joel -

AS Jim said, check the +10R and +10T busses. They are marked on the
parent board and MUST 'toggle' from receiveto transmit. You'll
probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
Q307 on the Transmit Exciter board.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Hi Jim,
>
> Thanks for responding, I just downloaded the SM for the rig, and will look
> at the schematics, anyhow I to the cover off and realized the PA was
> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I also
> noticed the plugging relay in the antenna compartment, is engaging when I
> turned the power switch on,
>
> Removing the jumper in the right bottom corner of the PA decreases that
> current to just a little over 2 Amps,
>
> The plugged in relay doesn't change when the ptt pressed, only the feed
> back cuts out,
>
> I will get familiar with the circuit operations and see what I can find,
>
> v44kai.....Joel.
>
>
> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
>
>> **
>>
>>
>>
>> Tap firmly on the radio in various spots. Does the feedback change? You may
>> have "dirty" Molex connectors. Check the +10T and +10R voltages to ensure
>> they
>> are switching properly. If not, a switching transistor on the exciter PCB
>> may
>> be defective.

>>
>> 73
>>
>> -Jim
>> NU0C
>>
>>
>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
>>
>>> Hi all on the group,
>>> I got home this afternoon from work, got in the shack and turned on my
>> ts-940, the TR-7A was on and receiving very well a couple friends were on
>> chatting, I the 940 came on, suddenly the TR-7A started with with a
>> squealing, and didn't stop squealing as it had a feedback in the speaker,
>>> now, no receiving of the signals it was, I wonder if for a brief moment
>> when the 940 came on, it might have transmitted briefly as it was in vox
>> from its last used this morning,
>>> The frequency and antennas for both rigs are closet enough.
>>>
>>> If I turned up the volume the squealing feedback gets louder, and the
>> S-meter increases with some static in the back ground,
>>> any idea, experience, possible damage, and of which board, I don't have
>> extenders,
>>> For sure it is not receiving even if I transmit closet to its frequency,
>>>
>>> Thanks in advanced,
>>>
>>>
>>> v44kai.....Joel.
>>> What you think guys,
>>>
>>>
>>

13101. Re: [DrakeRadio] PS-7 Repair!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 16:18:53 UTC
From: Garey Barrell
Topic: 13087 Message: 13101

Success!

I found the originals, Keystone (what else) 4626, and (of course) all
of the distributors only sell a package of 100 at 46 cents each. I
really don't need 96 spare transistor insulators, or want to spend
$46 on them!

Remembering my previous life, I called Keystone's sales department,
explained who I was and what I needed, and five pieces going out in
tomorrow's mail. SAMPLES!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Garey Barrell wrote:
> I think I found a (the?) problem with the power supply.
>
> On one of the nylon insulators mounting the power transistors to the
> heat sink, the Emitter lead either melted through the insulator and
> shorted to the heat sink, or the insulator was either defective or
> damaged in installation. The insulator has a gap, blackened on the
> edges, that would have allowed the lead to touch the heat sink. So
> now I need some insulators! The originals are pretty fancy, with a
> little handle on the back, etc. Replacements I've been able to find
> are just a skeleton (+) that should work fine.
>
> This might explain the sizzling sound when it went out.
>
>

13102. Re: [DrakeRadio] TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 16:34:14 UTC
From: Trevor Liburd
Topic: 13086 Message: 13102

Hi Garey,

Nice to see your response, ok I just check the 10+R and it is doing as it should10v rX and 0v TX, the 10+T is 8.3 in RX and 10v TX, so a switching issue here, will pull the exciter board and have a look,

Thanks Garey,

v44kai.....Joel.

On Thu, Apr 11, 2013 at 11:55 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Joel -
>
> AS Jim said, check the +10R and +10T busses. They are marked on the
> parent board and MUST 'toggle' from receiveto transmit. You'll
> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
> Q307 on the Transmit Exciter board.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
>
> Trevor Liburd wrote:
> > Hi Jim,
> >
> > Thanks for responding, I just downloaded the SM for the rig, and will
> look
> > at the schematics, anyhow I to the cover off and realized the PA was
> > getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I also
> > noticed the plugging relay in the antenna compartment, is engaging when I
> > turned the power switch on,
> >
> > Removing the jumper in the right bottom corner of the PA decreases that
> > current to just a little over 2 Amps,
> >
> > The plugged in relay doesn't change when the ptt pressed, only the feed
> > back cuts out,
> >

> > I will get familiar with the circuit operations and see what I can find,
> >
> > v44kai.....Joel.
> >
> >
> > On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...
> >wrote:
> >
> >> **
>
> >>
> >>
> >>
> >> Tap firmly on the radio in various spots. Does the feedback change? You
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> >> have "dirty" Molex connectors. Check the +10T and +10R voltages to
> ensure
> >> they
> >> are switching properly. If not, a switching transistor on the exciter
> PCB
> >> may
> >> be defective.
> >>
> >> 73
> >>
> >> -Jim
> >> NU0C
> >>
> >>
> >> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@...m wrote:
> >>
> >>> Hi all on the group,
> >>> I got home this afternoon from work, got in the shack and turned on my
> >> ts-940, the TR-7A was on and receiving very well a couple friends were
> on
> >> chatting, I the 940 came on, suddenly the TR-7A started with with a
> >> squealing, and didn't stop squealing as it had a feedback in the
> speaker,
> >>> now, no receiving of the signals it was, I wonder if for a brief moment
> >> when the 940 came on, it might have transmitted briefly as it was in vox
> >> from its last used this morning,
> >>> The frequency and antennas for both rigs are closet enough.
> >>>
> >>> If I turned up the volume the squealing feedback gets louder, and the
> >> S-meter increases with some static in the back ground,
> >>> any idea, experience, possible damage, and of which board, I don't have
> >> extenders,
> >>> For sure it is not receiving even if I transmit closet to its
> frequency,
> >>>

> >>> Thanks in advanced,
> >>>
> >>>
> >>> v44kai.....Joel.
> >>> What you think guys,
> >>>
> >>>
> >>
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13103. Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 19:13:41 UTC
From: Dave AA7EE
Topic: 13094 Message: 13103

I'm wondering if I am the David that this message applies to, as it did appear in the group shortly after I joined, and my name is indeed Dave.

The idea of Drake equipment was firmly planted in my mind when, as a 14 year-old in England G3EVT, one of my elmers, loaned me his 2B, as I didn't have a receiver of my own. Shortly afterwards, another local ham, G4DSE, put me on the mic of his beautiful Drake C-line station so that I could speak to another teenager in California. Boy was I hooked.

That was in the mid-late 1970's and ever since then, I have thought I would like to have my own 2B one of these days. I am not yet a Drake owner but am still flirting with the idea of owning a Drake 2B.

So if I am the Dave that you were referring to Gary, I would love a copy of the Drake 2B Service Supplement CD. I may not be a very active member of this group until such time as I become a Drake owner, so I have to admit I do feel just a little guilty about this but if it's of any consolation, I love Drake equipment, even though I don't any......yet!

Dave
AA7EE
http://aa7ee.wordpress.com

> Congratulations David! You have just become member 1000 of the
> DrakeRadio list on Yahoo Groups!
>
> Welcome to the best collection of Drake enthusiasts in the world.
(Snipped for brevity)

> 73, Garey - K4OAH

13104. Re: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 19:24:05 UTC
From: Garey Barrell
Topic: 13094 Message: 13104

Dave -

Well, you're smarter than I am, it would have helped to include the
callsign.! That's a good guess, you are indeed #1000.

Perhaps the CD will be the 'tipping point' and you'll go ahead and get
a 2-B. They're out there!

Your QRZ address ok?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dave AA7EE wrote:
>
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>
> The idea of Drake equipment was firmly planted in my mind when, as a 14 year-old in England G3EVT, one of my elmers, loaned me his 2B, as I didn't have a receiver of my own. Shortly afterwards, another local ham, G4DSE, put me on the mic of his beautiful Drake C-line station so that I could speak to another teenager in California. Boy was I hooked.
>
> That was in the mid-late 1970's and ever since then, I have thought I would like to have my own 2B one of these days. I am not yet a Drake owner but am still flirting with the idea of owning a Drake 2B.
>
> So if I am the Dave that you were referring to Gary, I would love a copy of the Drake 2B Service Supplement CD. I may not be a very active member of this group until such time as I become a Drake owner, so I have to admit I do feel just a little guilty about this but if it's of any consolation, I love Drake equipment, even though I don't any......yet!
>
> Dave
> AA7EE
> http://aa7ee.wordpress.com
>
>
>
>> Congratulations David! You have just become member 1000 of the
>> DrakeRadio list on Yahoo Groups!
>>
>> Welcome to the best collection of Drake enthusiasts in the world.

> (Snipped for brevity)
>

13105. Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 19:29:49 UTC
From: Dave AA7EE
Topic: 13094 Message: 13105

Yes Gary I'm good on QRZ, and am just about to embark on a regen building project though, as you say, that 2B Service Supplement CD sitting there might just push me over the edge :-)

Dave
AA7EE

> Dave -
>
> Well, you're smarter than I am, it would have helped to include the
> callsign.! That's a good guess, you are indeed #1000.
>
> Perhaps the CD will be the 'tipping point' and you'll go ahead and get
> a 2-B. They're out there!
>
> Your QRZ address ok?
>
> 73, Garey - K4OAH
> Glen Allen, VA

13106. Re: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 19:43:12 UTC
From: Bernie
Topic: 13094 Message: 13106

Dave,
I bought Garey's CD when I got my 2-B, and it is worth its weight in Gold! And that goes for the 2-B also. There is something about that receiver that outshines several of my other receivers. Since they seem to be escalating in value, grab one soon before they go the same way as the Halli SX-28...un-affordable.
Welcome to the group...Garey and three or four others are extremely knowledgable on all things Drake...
73

Bernie in ND
WD0GMD

----- Original Message -----
From: Dave AA7EE
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 11, 2013 2:29 PM
Subject: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yes Gary I'm good on QRZ, and am just about to embark on a regen building project though, as you say, that 2B Service Supplement CD sitting there might just push me over the edge :-)

Dave
AA7EE

> Dave -
>
> Well, you're smarter than I am, it would have helped to include the
> callsign.! That's a good guess, you are indeed #1000.
>
> Perhaps the CD will be the 'tipping point' and you'll go ahead and get
> a 2-B. They're out there!
>
> Your QRZ address ok?
>
> 73, Garey - K4OAH
> Glen Allen, VA

[Non-text portions of this message have been removed]

13107. Re: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 20:02:10 UTC
From: Garey Barrell
Topic: 13094 Message: 13107

Cool. Your CD will go out tomorrow via First Class mail.

Do you belong to the regenrx group?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dave AA7EE wrote:
>
> Yes Gary I'm good on QRZ, and am just about to embark on a regen building project though, as you say, that 2B Service Supplement CD sitting there might just push me over the edge :-)
>
> Dave
> AA7EE
>
>
>
>> Dave -
>>
>> Well, you're smarter than I am, it would have helped to include the
>> callsign.! That's a good guess, you are indeed #1000.
>>
>> Perhaps the CD will be the 'tipping point' and you'll go ahead and get
>> a 2-B. They're out there!
>>
>> Your QRZ address ok?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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13108. TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 20:08:23 UTC
From: slowcountry1
Topic: 13108 Message: 13108

About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.

Regards,

Doug N9XTF

13109. Re: [DrakeRadio] TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 20:56:10 UTC
From: Garey Barrell
Topic: 13108 Message: 13109

Doug -

Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It was used only in Version 4 of the TR-4. The next versions switched to a 6BZ6 which is a much more common tube. Succeeding versions used the 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and changing V5 to a 6BA6. They're right next to each other so it shouldn't be too difficult to do. Be sure and put a .005 disc ceramic across each filament (Pins 3 & 4).

A 12BA6 will sub for the 12BZ6 if you reverse the connections between Pin 2 and Pin 7, but NOT anidentical tube.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
>
>
> Regards,
>
> Doug N9XTF
>
>
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> ------------------------------------
>
> Yahoo! Groups Links
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>

13110. Re: [DrakeRadio] TR-4 Repair - 12BZ6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 21:04:08 UTC
From: Al Parker
Topic: 13108 Message: 13110

It's little tidbits like this that make this the greatest place for
Drake owners & info. My archives grow almost every day. Thanks Garey.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 4/11/2013 4:56 PM, Garey Barrell wrote:
> Doug -
>
> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> was used only in Version 4 of the TR-4. The next versions switched to
> a 6BZ6 which is a much more common tube. Succeeding versions used the
> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> changing V5 to a 6BA6. They're right next to each other so it
> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> across each filament (Pins 3 & 4).
>
> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> Pin 2 and Pin 7, but NOT anidentical tube.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > About 10 years ago, I acquired a TR-4 that was in need of repair. I
> am now finally getting around to working on it. V11 calls for a 12bz6.
> Someone had stuck a 6bz6 in its place and looks burned up. Is there a
> direct replacement for the 12bz6? I have a number of tubes on hand
> however, none of them are a 12bz6.
> >
> >
> > Regards,
> >
> > Doug N9XTF

13111. Re: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 21:04:47 UTC
From: Jim Shorney
Topic: 13078 Message: 13111

Yes Garey, it has to be a pure white LED flashlight so that brown and yellow photons don't contaminate the Higgs AGCons.

But seriously, use whatever works for you. It just happens that I have a miniature 1 Watt single-LED flashlight that I carry in my pocket wherever I go, it puts a very narrow bright light into dark corners of a radio. It's small size (1 AAA battery) makes it just right to put right next to your eye as you peek through holes in covers and nests of components looking for that one particular adjustment you need to reach.

73

-Jim (some call them "illumination tools")
NU0C

On Thu, 11 Apr 2013 09:55:08 -0400, Garey Barrell wrote:

>Is there some technical reason it has to be an LED flashlight??
>
>All I have are MiniMag lights, and they are all _filament_ lamps.
>
>We ARE all vintage vacuum tube here......
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> I will make one correction to what I wrote. After adjustment of the 10V
>> regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings don't
>> seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step 3-2).
>> It's pretty simple, you will need a long small flat-blade screwdriver with an
>> insulated shaft. A small LED flashlight will be useful too.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13112. SL-6000 AM filter for the TR-7?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 21:34:37 UTC
From: W7VH
Topic: 13112 Message: 13112

Hi,

I think I've found a nice TR7. It has a normal SSB filter
and a 300 hz CW filter. I'd like to have an SL-6000 for
SWL but can't seem to find one anywhere. Does anyone have
one they'd like to part with?

Contact me offline via the email address below.

Thanks,

Jon
W7VH
jon@...

13113. RE: [DrakeRadio] TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 22:02:26 UTC
From: Terrell Hamilton
Topic: 13078 Message: 13113

Time to get rid of my candle, I guess...

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Jim Shorney
Sent: Thursday, April 11, 2013 2:05 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR7 Alignment

Yes Garey, it has to be a pure white LED flashlight so that brown and yellow photons don't contaminate the Higgs AGCons.

But seriously, use whatever works for you. It just happens that I have a miniature 1 Watt single-LED flashlight that I carry in my pocket wherever I go,
it puts a very narrow bright light into dark corners of a radio. It's small size (1 AAA battery) makes it just right to put right next to your eye as you
peek through holes in covers and nests of components looking for that one particular adjustment you need to reach.

73

-Jim (some call them "illumination tools")
NU0C

On Thu, 11 Apr 2013 09:55:08 -0400, Garey Barrell wrote:

>Is there some technical reason it has to be an LED flashlight??
>
>All I have are MiniMag lights, and they are all _filament_ lamps.
>
>We ARE all vintage vacuum tube here......
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>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> I will make one correction to what I wrote. After adjustment of the 10V
>> regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings

don't
>> seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step
3-2).
>> It's pretty simple, you will need a long small flat-blade screwdriver
with an
>> insulated shaft. A small LED flashlight will be useful too.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and
he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

13114. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 22:40:01 UTC
From: slowcountry1
Topic: 13108 Message: 13114

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> was used only in Version 4 of the TR-4. The next versions switched to
> a 6BZ6 which is a much more common tube. Succeeding versions used the
> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> changing V5 to a 6BA6. They're right next to each other so it
> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> across each filament (Pins 3 & 4).
>
> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> Pin 2 and Pin 7, but NOT anidentical tube.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
> >
> >
> > Regards,
> >
> > Doug N9XTF
> >
> >
> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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>
Garey,

Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?

Thanks,

Doug

13115. Re: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-11 22:54:55 UTC
From: David Winfree
Topic: 13094 Message: 13115

Well; My name is David and i got the message too, but I already have my
CD set. So, be my guest!

On Thu, Apr 11, 2013 at 3:13 PM, Dave AA7EE <djdaverichards@...>wrote:

> **
>
>
>
>
> I'm wondering if I am the David that this message applies to, as it did
> appear in the group shortly after I joined, and my name is indeed Dave.
>
> The idea of Drake equipment was firmly planted in my mind when, as a 14
> year-old in England G3EVT, one of my elmers, loaned me his 2B, as I didn't
> have a receiver of my own. Shortly afterwards, another local ham, G4DSE,
> put me on the mic of his beautiful Drake C-line station so that I could
> speak to another teenager in California. Boy was I hooked.
>
> That was in the mid-late 1970's and ever since then, I have thought I
> would like to have my own 2B one of these days. I am not yet a Drake owner
> but am still flirting with the idea of owning a Drake 2B.
>
> So if I am the Dave that you were referring to Gary, I would love a copy
> of the Drake 2B Service Supplement CD. I may not be a very active member of
> this group until such time as I become a Drake owner, so I have to admit I
> do feel just a little guilty about this but if it's of any consolation, I
> love Drake equipment, even though I don't any......yet!
>
> Dave
> AA7EE
> http://aa7ee.wordpress.com
>
>
> > Congratulations David! You have just become member 1000 of the
> > DrakeRadio list on Yahoo Groups!
> >
> > Welcome to the best collection of Drake enthusiasts in the world.
> (Snipped for brevity)
>
> > 73, Garey - K4OAH
>
>
>

[Non-text portions of this message have been removed]

13116. Re: [DrakeRadio] SL-6000 AM filter for the TR-7?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 00:19:53 UTC
From: VE3AX/7
Topic: 13112 Message: 13116

Jon:

The AM filter is nice for sure, but much harder to find than some of the others.

In the meantime, try this;

AM Filter
An AM filter is almost impossible to find. You can fake an AM 'filter' by putting a 390 ohm resistor through the input and output pins of any blank crystal filter position. It actually isn't bad. What is determining the selectivity is the 48 MHz first IF filter.

73
Peter
VE3AX/7

From: W7VH
Sent: Thursday, April 11, 2013 2:34 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] SL-6000 AM filter for the TR-7?

Hi,

I think I've found a nice TR7. It has a normal SSB filter
and a 300 hz CW filter. I'd like to have an SL-6000 for
SWL but can't seem to find one anywhere. Does anyone have
one they'd like to part with?

Contact me offline via the email address below.

Thanks,

Jon
W7VH
mailto:jon%40jonneher.com

[Non-text portions of this message have been removed]

13117. Re: [DrakeRadio] SL-6000 AM filter for the TR-7?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 00:52:32 UTC
From: Paul Pollock
Topic: 13112 Message: 13117

To Jon W7VH,

Inrad has the filter, 1710.2: $130+ship.

-Paul Pollock
KD7BWB

On Apr 11, 2013, at 5:19 PM, VE3AX/7 wrote:

> Jon:
>
> The AM filter is nice for sure, but much harder to find than some of the others.
>
> In the meantime, try this;
>
> AM Filter
> An AM filter is almost impossible to find. You can fake an AM 'filter' by putting a 390 ohm resistor through the input and output pins of any blank crystal filter position. It actually isn't bad. What is determining the selectivity is the 48 MHz first IF filter.
>
> 73
> Peter
> VE3AX/7
>
> From: W7VH
> Sent: Thursday, April 11, 2013 2:34 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] SL-6000 AM filter for the TR-7?
>
> Hi,
>
> I think I've found a nice TR7. It has a normal SSB filter
> and a 300 hz CW filter. I'd like to have an SL-6000 for
> SWL but can't seem to find one anywhere. Does anyone have
> one they'd like to part with?
>
> Contact me offline via the email address below.
>
> Thanks,
>
> Jon
> W7VH
> mailto:jon%40jonneher.com
>
> [Non-text portions of this message have been removed]
>

>

[Non-text portions of this message have been removed]

13118. Re: [DrakeRadio] Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 01:18:11 UTC
From: Garey Barrell
Topic: 13094 Message: 13118

David -

No, the 'other' David was the right one. He had just joined today
about two hours before I saw it. I've been watching since about 995
since I wanted to catch the 'miscreant'! :-)

Maybe this will push him over the edge on a 2-B, and 'nobody can have
just one Drake!.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

David Winfree wrote:
> Well; My name is David and i got the message too, but I already have my
> CD set. So, be my guest!
>
>
> On Thu, Apr 11, 2013 at 3:13 PM, Dave AA7EE <djdaverichards@...>wrote:
>
>> **
>>
>>
>>
>>
>> I'm wondering if I am the David that this message applies to, as it did
>> appear in the group shortly after I joined, and my name is indeed Dave.
>>
>> The idea of Drake equipment was firmly planted in my mind when, as a 14
>> year-old in England G3EVT, one of my elmers, loaned me his 2B, as I didn't
>> have a receiver of my own. Shortly afterwards, another local ham, G4DSE,
>> put me on the mic of his beautiful Drake C-line station so that I could
>> speak to another teenager in California. Boy was I hooked.
>>
>> That was in the mid-late 1970's and ever since then, I have thought I
>> would like to have my own 2B one of these days. I am not yet a Drake owner
>> but am still flirting with the idea of owning a Drake 2B.
>>
>> So if I am the Dave that you were referring to Gary, I would love a copy
>> of the Drake 2B Service Supplement CD. I may not be a very active member of
>> this group until such time as I become a Drake owner, so I have to admit I
>> do feel just a little guilty about this but if it's of any consolation, I
>> love Drake equipment, even though I don't any......yet!

>>
>> Dave
>> AA7EE
>> http://aa7ee.wordpress.com
>>
>>
>>> Congratulations David! You have just become member 1000 of the
>>> DrakeRadio list on Yahoo Groups!
>>>
>>> Welcome to the best collection of Drake enthusiasts in the world.
>> (Snipped for brevity)
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>>> 73, Garey - K4OAH
>>
>>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13119. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 02:08:56 UTC
From: Garey Barrell
Topic: 13108 Message: 13119

Doug-

Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
to ground and the resistor goes to 2. Just swap them.

As I said, this is NOT a 'perfect' swap and will affect your AVC
action. It's really just something you can use to work on the radio
while you look for a tube if you decide to go for the 12BZ6. The real
FIX is to put those two filaments in series and add the bypass caps,
and replace both V5 and V11 with 6 Volt versions.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
>> was used only in Version 4 of the TR-4. The next versions switched to
>> a 6BZ6 which is a much more common tube. Succeeding versions used the
>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
>> changing V5 to a 6BA6. They're right next to each other so it
>> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
>> across each filament (Pins 3 & 4).
>>
>> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
>> Pin 2 and Pin 7, but NOT anidentical tube.
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>
>> slowcountry1 wrote:
>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally
getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its
place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of
tubes on hand however, none of them are a 12bz6.

>>>
>>>
>>> Regards,
>>>
>>> Doug N9XTF
>>>
>>>
>>>
>>>
>>> ------------------------------------
>>>
>>> Yahoo! Groups Links
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>>>
> Garey,
>
> Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
>
> Thanks,
>
> Doug
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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>
>

13120. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 02:30:43 UTC
From: slowcountry1
Topic: 13108 Message: 13120

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug-
>
> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
> to ground and the resistor goes to 2. Just swap them.
>
> As I said, this is NOT a 'perfect' swap and will affect your AVC
> action. It's really just something you can use to work on the radio
> while you look for a tube if you decide to go for the 12BZ6. The real
> FIX is to put those two filaments in series and add the bypass caps,
> and replace both V5 and V11 with 6 Volt versions.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> slowcountry1 wrote:
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> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> >> was used only in Version 4 of the TR-4. The next versions switched to
> >> a 6BZ6 which is a much more common tube. Succeeding versions used the
> >> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> >> changing V5 to a 6BA6. They're right next to each other so it
> >> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> >> across each filament (Pins 3 & 4).
> >>
> >> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> >> Pin 2 and Pin 7, but NOT anidentical tube.
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> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally

getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
> >>>
> >>>
> >>> Regards,
> >>>
> >>> Doug N9XTF
> >>>
> >>>
> >>>
> >>>
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> >>>
> >>> Yahoo! Groups Links
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> >>>
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> > Garey,
> >
> > Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
> >
> > Thanks,
> >
> > Doug
> >
> >
> >
> > ------------------------------------
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> >
>
Garey,

I wanted to make sure that I was understanding you correctly. I had made the change and then fired the rig back up. When I installed the 12ba6 and turned the rig on, I smoked resistors r53, r71 and an unknown resistor next to r56 on board 8. I replaced the resistors, put pins 2 and 7 back to normal and put the 6BZ6 in momentarily as it had worked previously. I immediately smoked r53 again. I have obviously failed another component that I have not found yet. Do these resistors need to be carbon comp or can one use resistors off the shelf in these locations.

When I started with the rig today, I had no receive or transmit. I was able to get the reciever to work with strong signals and thats when i found the 6bz6. I did not get anywhere near troubleshooting the transmit issue.

13121. Re: [DrakeRadio] TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 03:07:15 UTC
From: Steve Wedge
Topic: 13108 Message: 13121

Check to make sure the filament wasn't required to accept the 6BZ6 first.

Steve Wedge, W1ES/7
Grand Canyon Village, AZ

Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Apr 11, 2013, at 1:08 PM, "slowcountry1" <dcoffman@...> wrote:

> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
>
> Regards,
>
> Doug N9XTF
>
>

[Non-text portions of this message have been removed]

13122. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 03:31:10 UTC
From: slowcountry1
Topic: 13108 Message: 13122

--- In DrakeRadio@yahoogroups.com, Steve Wedge <w1es1982@...> wrote:
>
> Check to make sure the filament wasn't required to accept the 6BZ6 first.
>
> Steve Wedge, W1ES/7
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> On Apr 11, 2013, at 1:08 PM, "slowcountry1" <dcoffman@...> wrote:
>
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> >
> > Regards,
> >
> > Doug N9XTF
> >
> >
>
>
> [Non-text portions of this message have been removed]
>
Steve

I'll have to check it but given how bright the 6BZ6 was lit prior to removing it and then When replaced after trying the 12 series tube I'm sure it's wired for 12 volts. It was very bright. The glass on the 6bz6 was blackened as well.

13123. Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 06:09:01 UTC
From: Dave AA7EE
Topic: 13094 Message: 13123

It's funny you mention that Gary, as I have just spent the last hour browsing the regenrx group. I'm planning a little regen project.

However, even though it wasn't really in the budget, I think I might also keep an eye open for a 2B in nice condition at the right price. I'd like to crystal it up for a few of the SWBC bands too. It strikes me that it'd make a really nice RX for SWBC listening too.

Look what you've started Gary :-)

Dave
AA7EE

> Cool. Your CD will go out tomorrow via First Class mail.
>
> Do you belong to the regenrx group?
>
> 73, Garey - K4OAH
> Glen Allen, VA

13124. Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 06:17:51 UTC
From: Dave AA7EE
Topic: 13094 Message: 13124

Bernie -

I've seen Garey's site before when browsing the internet for things Drake, and his Service Supplement CD's certainly do look very useful and informative. It will make me feel a lot more confident about being able to keep my 2B in good working condition.

Not that I'm about to get one but, well, you never know. It's really not in the budget right now but if I were juggle a few things around and look at the situation from a different perspective......

Dave
AA7EE

> Dave,
> I bought Garey's CD when I got my 2-B, and it is worth its weight in Gold! And that goes for the 2-B also. There is something about that receiver that outshines several of my other receivers. Since they seem to be escalating in value, grab one soon before they go the same way as the Halli SX-28...un-affordable.
> Welcome to the group...Garey and three or four others are extremely knowledgable on all things Drake...
> 73
>
> Bernie in ND
> WD0GMD

13126. Re: [DrakeRadio] FS: Ready to Play TR4 System

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 17:43:14 UTC
From: Garey Barrell
Topic: 13125 Message: 13126

That is a version 8 of the TR-4, one of the last made. The highest s/n
I'veseen is 328xx, and the TR-4C started at 34000, leading me to
believe that the 33000 block was skipped. Perhaps they didn't want
to start on an odd number! :-)

Does that unit have a plug-in relay under the chassis, or the wired-in
relay near the power connector?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

captcurt2000 wrote:
> GA List:
>
> Thinning out some of my collection here so have this very nice TR4 system for sale:
>
> TR4- Late production unit with the NB knob. Front panel and case is 8.5-9 condition. No case scratches or rust etc. It is the very light-textured powder coat original. Only a couple of faint foot marks from stuff sitting on top of it. Front panel is excellent. LED lighting. VFO is smooth and no jumping. All controls, switches, modes operate quietly and properly. Rig is the best sounding SSB rig I have. Copper is fair to good--no corrosion only some spotting and dust--see pictures.
>
> RV4- Remote VFO works as it should. Front panel is good to very good. Standard lighting. Case has been refinished well with paint. Copper is bright and shiny--excellent. Works perfectly with the TR4 as it should.
>
> AC4-R- Standard AC4 with the heathkit shop refit kit installed. Cover is clean and bright. Runs quietly inside the RV-4. Will ship removed from RV-4.
>
> This set-up is ready to plug and play--full power and looks as good as it sounds.
>
> See photo album here:
https://picasaweb.google.com/captcurt08/TR4RV4AC4R?authkey=Gv1sRgCOHE05Kz0MrnRg
>
> Asking $650 and split actual shipping of 3 boxes via Fedex Ground to lower 48
>
> Please contact me off list
>
> KU8L@...
>
>

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> Yahoo! Groups Links
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13127. TR-4 repair re 6BZ6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 19:41:45 UTC
From: John Sehring
Topic: 13127 Message: 13127

RCA shows a 6JH6 as a sub for a 6BZ6--it sez so right on the tube carton.

No 12JH6 is listed in RCA RC-29 (1973) Receiving Tube Manual. Oh well. But there is a 4JH6 for use in B&W TV's.

I think I would prefer (I haven't had to do this--yet) to add a series resistor to bring fil voltage down to 6.30 V. Seems like the least critical way.

Yes, I like my filament voltages spot on. Tubes laster longer & work better that way.

--John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada

13128. Re: [DrakeRadio] TR-4 repair re 6BZ6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 20:24:30 UTC
From: Garey Barrell
Topic: 13127 Message: 13128

John -

Generally, I would agree with you. The 6JH6 doesn't come up in my sub guidebook, but IS an 'equivalent' tube. Good info!

However, the change in a TR-4 would be so simple, the tubes are practically next to each other, and Drake 'corrected' the situation the same way in the next version. The R-4 series receivers also started off with a 12BZ6, plus the 2-C. The R-4B finally changed to a 6BZ6, and the second version of the 2-C also changed. There were LOTS of R-4 and R-4A changed, because the 12BZ6 was rare and expensive even then. Fortunately all the receivers had center-tapped filament windings, and there was6V on a tie strip right near the tube.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
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>
>

13129. RE: [DrakeRadio] TR-4 repair re 6BZ6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 21:03:44 UTC
From: Ian Reeve
Topic: 13127 Message: 13129

Hi John,

The 6JH6 is a direct substitute for the 6BZ6. Both are available through the e-Bidding site!
Possibly a little costly but easily obtainable. The 6BZ6 do seem problematical as they often suffer inter grid leakage so perhaps a 6JH6 would be worth a try.
The 4JH6 because of heater supply of 4.2v @ .45A would require a series dropper of 4.67 ohms but the valves do seem cheaper.

73

Ian M0IDR Evesham, UK

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: wb0eq@...
Date: Fri, 12 Apr 2013 12:41:45 -0700
Subject: [DrakeRadio] TR-4 repair re 6BZ6

RCA shows a 6JH6 as a sub for a 6BZ6--it sez so right on the tube carton.

No 12JH6 is listed in RCA RC-29 (1973) Receiving Tube Manual. Oh well. But there is a 4JH6 for use in B&W TV's.

I think I would prefer (I haven't had to do this--yet) to add a series resistor to bring fil voltage down to 6.30 V. Seems like the least critical way.

Yes, I like my filament voltages spot on. Tubes laster longer & work better that way.

--John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada

[Non-text portions of this message have been removed]

13130. Re: [DrakeRadio] TR-4 repair re 6BZ6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 21:17:13 UTC
From: Garey Barrell
Topic: 13127 Message: 13130

Yes, the 6JH6 or 6BZ6 are readily available frommultiple tube sellers,
as is the 12BZ6. The 6BZ6 typically goesfor about $3, the 12BZ6 for
$9. If you want to pay twice that and more, you can buy them on eBay!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Ian Reeve wrote:
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>
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> Possibly a little costly but easily obtainable. The 6BZ6 do seem problematical as they often suffer inter grid leakage so perhaps a 6JH6 would be worth a try.
> The 4JH6 because of heater supply of 4.2v @ .45A would require a series dropper of 4.67 ohms but the valves do seem cheaper.
>

13131. Re: [DrakeRadio] Component Replacement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-12 21:54:09 UTC
From: Kihwal Lee
Topic: 13022 Message: 13131

> Eventually it got into the 'Art wouldn't have approved'

> discussion (you DO know that each sealed PTO has air in
> it that was breathed by Art don't you)?

That explains why the desiccant bags in those PTOs are almost always pink.

Kihwal, K9SUL

[Non-text portions of this message have been removed]

13132. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 02:21:12 UTC
From: slowcountry1
Topic: 13108 Message: 13132

Garey,

I visited a forgotten about old TV repair shop today and acquired the appropriate carbon comp resistors to replace the burnt units stated previously. In addition, I obtained 10 each 6BA6, 12BZ6 and 12BY7A old stock tubes. I could not remember what other tubes were in the radio, so I did not get those, but plan a return trip. I paid $1.00 per tube, was well worth the trip.

I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?

Thanks,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug-
>
> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
> to ground and the resistor goes to 2. Just swap them.
>
> As I said, this is NOT a 'perfect' swap and will affect your AVC
> action. It's really just something you can use to work on the radio
> while you look for a tube if you decide to go for the 12BZ6. The real
> FIX is to put those two filaments in series and add the bypass caps,
> and replace both V5 and V11 with 6 Volt versions.
>
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> slowcountry1 wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>

> >> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> >> was used only in Version 4 of the TR-4. The next versions switched to
> >> a 6BZ6 which is a much more common tube. Succeeding versions used the
> >> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
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> > Doug
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13133. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 02:41:38 UTC
From: Garey Barrell
Topic: 13108 Message: 13133

Doug -

I would say it was well worth the trip!! :-) Did you buy all of those tubes?

If you get nothing in the -x position,how about receive? When you turn on the Calibrator, and tune from below it,through zero beat and above it, you should begin to hear a highpitch tone, decreasing to zero beat, and very little tone above zero beat. Then tuning back low, switching to the other SIDEBAND and then tuning higher in frequency again you should hear little or no tone, through zero beat and then an increasing pitch up to 2500 Hz or so. Think of the letter "M" with zero beat in the valley 'middle' and then depending upon which filter you select you should hear ONE of the peaks.

Let me know what you get!

73, Garey - K4OAH
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>>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
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13134. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 03:05:03 UTC
From: slowcountry1
Topic: 13108 Message: 13134

Gary,

Yes, I purchased all 30 tubes.

Yes, I'm able to set the switch to Cal and I have the Cal tone I can run through on both USB AND LSB. The zero beat acts just like it does on my TR-4Cw.

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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> Doug -
>
> I would say it was well worth the trip!! :-) Did you buy all of those
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> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
> >>>>>
> >>>>>
> >>>>> Regards,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>>>> ------------------------------------
> >>>>>
> >>>>> Yahoo! Groups Links
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>> Garey,
> >>>
> >>> Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
> >>>
> >>> Thanks,
> >>>
> >>> Doug
> >>>
> >>>
> >>>
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> >
> >
>

13135. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 03:11:48 UTC
From: slowcountry1
Topic: 13108 Message: 13135

Garry,

I forgot to mention that the audio output seems low to me. I have to set the volume to about 12 o'clock on a reasonable signal to have it at the correct volume. My 4Cw is about 9 o'clock or less.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I would say it was well worth the trip!! :-) Did you buy all of those
> tubes?
>
> If you get nothing in the -x position,how about receive? When you turn
> on the Calibrator, and tune from below it,through zero beat and above
> it, you should begin to hear a highpitch tone, decreasing to zero
> beat, and very little tone above zero beat. Then tuning back low,
> switching to the other SIDEBAND and then tuning higher in frequency
> again you should hear little or no tone, through zero beat and then an
> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
> zero beat in the valley 'middle' and then depending upon which filter
> you select you should hear ONE of the peaks.
>
> Let me know what you get!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> >
> > Garey,
> >
> > I visited a forgotten about old TV repair shop today and acquired the appropriate carbon comp resistors to replace the burnt units stated previously. In addition, I obtained 10 each 6BA6, 12BZ6 and 12BY7A old stock tubes. I could not remember what other tubes were in the radio, so I did not get those, but plan a return trip. I paid $1.00 per tube, was well worth the trip.
> >
> > I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma.

If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
> >
> > Thanks,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug-
> >>
> >> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
> >> to ground and the resistor goes to 2. Just swap them.
> >>
> >> As I said, this is NOT a 'perfect' swap and will affect your AVC
> >> action. It's really just something you can use to work on the radio
> >> while you look for a tube if you decide to go for the 12BZ6. The real
> >> FIX is to put those two filaments in series and add the bypass caps,
> >> and replace both V5 and V11 with 6 Volt versions.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> >>>> was used only in Version 4 of the TR-4. The next versions switched to
> >>>> a 6BZ6 which is a much more common tube. Succeeding versions used the
> >>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> >>>> changing V5 to a 6BA6. They're right next to each other so it
> >>>> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> >>>> across each filament (Pins 3 & 4).
> >>>>
> >>>> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> >>>> Pin 2 and Pin 7, but NOT anidentical tube.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>

13136. Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 03:38:16 UTC
From: v44kai@...
Topic: 13086 Message: 13136

I started work again tonight, on the TR-7A, all transistors on the exciter board are good, I did a couple elimination surgery on the parent board, and all indicate the 8.3v on the T10+ buss in RX mode is coming from the up-converter board,

The manual I downloaded is missing a page or two, I only have the first page of the schematic, I'm not seeing the T10+ and some other terminal lines, anyone have the complete section for the up-converter board? I will appreciate a copy,

Thanks in advanced,

v44kai.....Joel.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Joel -
>
> AS Jim said, check the +10R and +10T busses. They are marked on the
> parent board and MUST 'toggle' from receiveto transmit. You'll
> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
> Q307 on the Transmit Exciter board.
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> Trevor Liburd wrote:
> > Hi Jim,
> >
> > Thanks for responding, I just downloaded the SM for the rig, and will look
> > at the schematics, anyhow I to the cover off and realized the PA was
> > getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I also
> > noticed the plugging relay in the antenna compartment, is engaging when I
> > turned the power switch on,
> >
> > Removing the jumper in the right bottom corner of the PA decreases that
> > current to just a little over 2 Amps,
> >
> > The plugged in relay doesn't change when the ptt pressed, only the feed
> > back cuts out,
> >
> > I will get familiar with the circuit operations and see what I can find,
> >
> > v44kai.....Joel.

> >
> >
> > On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
> >
> >> **
> >>
> >>
> >>
> >> Tap firmly on the radio in various spots. Does the feedback change? You may
> >> have "dirty" Molex connectors. Check the +10T and +10R voltages to ensure
> >> they
> >> are switching properly. If not, a switching transistor on the exciter PCB
> >> may
> >> be defective.
> >>
> >> 73
> >>
> >> -Jim
> >> NU0C
> >>
> >>
> >> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
> >>
> >>> Hi all on the group,
> >>> I got home this afternoon from work, got in the shack and turned on my
> >> ts-940, the TR-7A was on and receiving very well a couple friends were on
> >> chatting, I the 940 came on, suddenly the TR-7A started with with a
> >> squealing, and didn't stop squealing as it had a feedback in the speaker,
> >>> now, no receiving of the signals it was, I wonder if for a brief moment
> >> when the 940 came on, it might have transmitted briefly as it was in vox
> >> from its last used this morning,
> >>> The frequency and antennas for both rigs are closet enough.
> >>>
> >>> If I turned up the volume the squealing feedback gets louder, and the
> >> S-meter increases with some static in the back ground,
> >>> any idea, experience, possible damage, and of which board, I don't have
> >> extenders,
> >>> For sure it is not receiving even if I transmit closet to its frequency,
> >>>
> >>> Thanks in advanced,
> >>>
> >>>
> >>> v44kai.....Joel.
> >>> What you think guys,
> >>>
> >>>
> >>
>

13137. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 04:27:44 UTC
From: Jim Shorney
Topic: 13086 Message: 13137

Sent via direct email, complete TR-7 circuit diagrams set that I found on the internet somewhere a long time ago, in a galaxy far, far away...

73

-Jim
NU0C

On Sat, 13 Apr 2013 03:38:16 -0000, v44kai@... wrote:

>I started work again tonight, on the TR-7A, all transistors on the exciter board are good, I did a couple elimination surgery on the parent board, and all indicate the 8.3v on the T10+ buss in RX mode is coming from the up-converter board,
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>The manual I downloaded is missing a page or two, I only have the first page of the schematic, I'm not seeing the T10+ and some other terminal lines, anyone have the complete section for the up-converter board? I will appreciate a copy,
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>> 73, Garey - K4OAH
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>> >>> Thanks in advanced,
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>> >>> v44kai.....Joel.
>> >>> What you think guys,
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>> >>
>>
>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

13138. Re: TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 04:51:50 UTC
From: ka8asn
Topic: 13078 Message: 13138

--- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" <hamilter@...> wrote:
>
> Time to get rid of my candle, I guess...
>
>
>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Jim Shorney
> Sent: Thursday, April 11, 2013 2:05 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TR7 Alignment
>
>
>
>
>
>
>
> Yes Garey, it has to be a pure white LED flashlight so that brown and yellow
> photons don't contaminate the Higgs AGCons.
>
> But seriously, use whatever works for you. It just happens that I have a
> miniature 1 Watt single-LED flashlight that I carry in my pocket wherever I
> go,
> it puts a very narrow bright light into dark corners of a radio. It's small
> size (1 AAA battery) makes it just right to put right next to your eye as
> you
> peek through holes in covers and nests of components looking for that one
> particular adjustment you need to reach.
>
> 73
>
> -Jim (some call them "illumination tools")
> NU0C
>
> On Thu, 11 Apr 2013 09:55:08 -0400, Garey Barrell wrote:
>
> >Is there some technical reason it has to be an LED flashlight??
> >
> >All I have are MiniMag lights, and they are all _filament_ lamps.

> >
> >We ARE all vintage vacuum tube here......
> >
> >73, Garey - K4OAH
> >Glen Allen, VA
> >
> >Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >and TR-4/C Service Supplement CDs
> ><www.k4oah.com>
> >
> >Jim Shorney wrote:
> >> I will make one correction to what I wrote. After adjustment of the 10V
> >> regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings
> don't
> >> seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step
> 3-2).
> >> It's pretty simple, you will need a long small flat-blade screwdriver
> with an
> >> insulated shaft. A small LED flashlight will be useful too.
> >>
> >> 73
> >>
> >> -Jim
> >> NU0C
> >>
> >>
> >
> >
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
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> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

13139. Re: TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 04:53:52 UTC
From: ka8asn
Topic: 13078 Message: 13139

Hey Guys, I really wanted to let you know I used the flash of MIG welder to check the position of this pot!

MIke KA8ASN

--- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" <hamilter@...> wrote:
>
> Time to get rid of my candle, I guess...
>
>
>
> Terry K7WLD
>
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>
>
>
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> photons don't contaminate the Higgs AGCons.
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> size (1 AAA battery) makes it just right to put right next to your eye as
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>
>
>
>

>
> [Non-text portions of this message have been removed]
>

13140. TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 05:58:58 UTC
From: zl1bbw
Topic: 13140 Message: 13140

I am looking at a TR4 RV4 AC4 combo that looks in pretty good condx, reported that it is working on 40 not tested on other bands.

Is this a desirable combo in the terms of Drakeology? I have a B & C line already, and like an idiot in a moment of financial strife let 4NT go, silly day.

The serial number is in low 27k series has a black pa cage, copper chassis, the dial has the skirt with khz around it, no noise blanker.

Any idea what is worth/desirability is? and how do they perform? thanks

13141. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 12:18:58 UTC
From: Trevor Liburd
Topic: 13086 Message: 13141

Found CR403 on up-converter board leaky, I have no such PIN diode in stock,
what is a close fit for this to common diodes 1N914 etc ?

v44kai.....Joel.

On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@...> wrote:

> **
>
>
> I started work again tonight, on the TR-7A, all transistors on the exciter
> board are good, I did a couple elimination surgery on the parent board, and
> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
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> > >> ts-940, the TR-7A was on and receiving very well a couple friends
> were on
> > >> chatting, I the 940 came on, suddenly the TR-7A started with with a

> > >> squealing, and didn't stop squealing as it had a feedback in the
> speaker,
> > >>> now, no receiving of the signals it was, I wonder if for a brief
> moment
> > >> when the 940 came on, it might have transmitted briefly as it was in
> vox
> > >> from its last used this morning,
> > >>> The frequency and antennas for both rigs are closet enough.
> > >>>
> > >>> If I turned up the volume the squealing feedback gets louder, and the
> > >> S-meter increases with some static in the back ground,
> > >>> any idea, experience, possible damage, and of which board, I don't
> have
> > >> extenders,
> > >>> For sure it is not receiving even if I transmit closet to its
> frequency,
> > >>>
> > >>> Thanks in advanced,
> > >>>
> > >>>
> > >>> v44kai.....Joel.
> > >>> What you think guys,
> > >>>
> > >>>
> > >>
> >
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13142. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 13:58:59 UTC
From: Garey Barrell
Topic: 13086 Message: 13142

Joel -

That is acommon PIN diode. They are available from several eBay
suppliers. You 'could' use a 1N4007 as a temporary sub to continue
troubleshooting.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Found CR403 on up-converter board leaky, I have no such PIN diode in stock,
> what is a close fit for this to common diodes 1N914 etc ?
>
> v44kai.....Joel.
>
>
> On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@...> wrote:
>
>> **
>>
>>
>> I started work again tonight, on the TR-7A, all transistors on the exciter
>> board are good, I did a couple elimination surgery on the parent board, and
>> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
>> up-converter board,
>>
>> The manual I downloaded is missing a page or two, I only have the first
>> page of the schematic, I'm not seeing the T10+ and some other terminal
>> lines, anyone have the complete section for the up-converter board? I will
>> appreciate a copy,
>>
>> Thanks in advanced,
>>
>> v44kai.....Joel.
>>
>>
>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>> Joel -
>>>
>>> AS Jim said, check the +10R and +10T busses. They are marked on the
>>> parent board and MUST 'toggle' from receiveto transmit. You'll
>>> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and

>>> Q307 on the Transmit Exciter board.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> Trevor Liburd wrote:
>>>> Hi Jim,
>>>>
>>>> Thanks for responding, I just downloaded the SM for the rig, and will
>> look
>>>> at the schematics, anyhow I to the cover off and realized the PA was
>>>> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I
>> also
>>>> noticed the plugging relay in the antenna compartment, is engaging
>> when I
>>>> turned the power switch on,
>>>>
>>>> Removing the jumper in the right bottom corner of the PA decreases that
>>>> current to just a little over 2 Amps,
>>>>
>>>> The plugged in relay doesn't change when the ptt pressed, only the feed
>>>> back cuts out,
>>>>
>>>> I will get familiar with the circuit operations and see what I can
>> find,
>>>> v44kai.....Joel.
>>>>
>>>>
>>>> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
>>>>> **
>>>>>
>>>>>
>>>>>
>>>>> Tap firmly on the radio in various spots. Does the feedback change?
>> You may
>>>>> have "dirty" Molex connectors. Check the +10T and +10R voltages to
>> ensure
>>>>> they
>>>>> are switching properly. If not, a switching transistor on the exciter
>> PCB
>>>>> may
>>>>> be defective.
>>>>>
>>>>> 73
>>>>>
>>>>> -Jim

>>>>> NU0C
>>>>>
>>>>>
>>>>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
>>>>>
>>>>>> Hi all on the group,
>>>>>> I got home this afternoon from work, got in the shack and turned on
>> my
>>>>> ts-940, the TR-7A was on and receiving very well a couple friends
>> were on
>>>>> chatting, I the 940 came on, suddenly the TR-7A started with with a
>>>>> squealing, and didn't stop squealing as it had a feedback in the
>> speaker,
>>>>>> now, no receiving of the signals it was, I wonder if for a brief
>> moment
>>>>> when the 940 came on, it might have transmitted briefly as it was in
>> vox
>>>>> from its last used this morning,
>>>>>> The frequency and antennas for both rigs are closet enough.
>>>>>>
>>>>>> If I turned up the volume the squealing feedback gets louder, and the
>>>>> S-meter increases with some static in the back ground,
>>>>>> any idea, experience, possible damage, and of which board, I don't
>> have
>>>>> extenders,
>>>>>> For sure it is not receiving even if I transmit closet to its
>> frequency,
>>>>>> Thanks in advanced,
>>>>>>
>>>>>>
>>>>>> v44kai.....Joel.
>>>>>> What you think guys,
>>>>>>
>>>>>>
>>
>>
>
>

13143. Re: [DrakeRadio] Re: TR7 Alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:05:57 UTC
From: Jim Shorney
Topic: 13078 Message: 13143

That would double nicely as an EMP tolerance test....

73
-Jim
NU0C

On Sat, 13 Apr 2013 04:53:52 -0000, ka8asn wrote:

>Hey Guys, I really wanted to let you know I used the flash of MIG welder to check the position of this pot!
>
>MIke KA8ASN
>
>--- In DrakeRadio@yahoogroups.com, "Terrell Hamilton" <hamilter@...> wrote:
>>
>> Time to get rid of my candle, I guess...
>>
>>
>>
>> Terry K7WLD
>>
>> Wenatchee, WA
>>
>>
>>
>> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
>> Behalf Of Jim Shorney
>> Sent: Thursday, April 11, 2013 2:05 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] TR7 Alignment
>>
>>
>>
>>
>>
>>
>>
>> Yes Garey, it has to be a pure white LED flashlight so that brown and yellow
>> photons don't contaminate the Higgs AGCons.
>>
>> But seriously, use whatever works for you. It just happens that I have a
>> miniature 1 Watt single-LED flashlight that I carry in my pocket wherever I
>> go,
>> it puts a very narrow bright light into dark corners of a radio. It's small
>> size (1 AAA battery) makes it just right to put right next to your eye as
>> you
>> peek through holes in covers and nests of components looking for that one

>> particular adjustment you need to reach.
>>
>> 73
>>
>> -Jim (some call them "illumination tools")
>> NU0C
>>
>> On Thu, 11 Apr 2013 09:55:08 -0400, Garey Barrell wrote:
>>
>> >Is there some technical reason it has to be an LED flashlight??
>> >
>> >All I have are MiniMag lights, and they are all _filament_ lamps.
>> >
>> >We ARE all vintage vacuum tube here......
>> >
>> >73, Garey - K4OAH
>> >Glen Allen, VA
>> >
>> >Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> >and TR-4/C Service Supplement CDs
>> ><www.k4oah.com>
>> >
>> >Jim Shorney wrote:
>> >> I will make one correction to what I wrote. After adjustment of the 10V
>> >> regulator, the S-Meter/ACG may need adjustment. If the S-Meter readings
>> don't
>> >> seem sane, or the AGC sounds mushy, do the S-Meter/AGC alignment (step
>> 3-2).
>> >> It's pretty simple, you will need a long small flat-blade screwdriver
>> with an
>> >> insulated shaft. A small LED flashlight will be useful too.
>> >>
>> >> 73
>> >>
>> >> -Jim
>> >> NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13144. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:08:54 UTC
From: Garey Barrell
Topic: 13108 Message: 13144

Doug-

I don't think I know the s/n of your TR-4. Versions 7 and 8 added a
single transistor AF preamp for increased audio. This is about s/n
30000 and up. Of course it was carried over to the TR-4C, all versions.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garry,
>
> I forgot to mention that the audio output seems low to me. I have to set the volume to about 12 o'clock on a reasonable signal to have it at the correct volume. My 4Cw is about 9 o'clock or less.
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> I would say it was well worth the trip!! :-) Did you buy all of those
>> tubes?
>>
>> If you get nothing in the -x position,how about receive? When you turn
>> on the Calibrator, and tune from below it,through zero beat and above
>> it, you should begin to hear a highpitch tone, decreasing to zero
>> beat, and very little tone above zero beat. Then tuning back low,
>> switching to the other SIDEBAND and then tuning higher in frequency
>> again you should hear little or no tone, through zero beat and then an
>> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
>> zero beat in the valley 'middle' and then depending upon which filter
>> you select you should hear ONE of the peaks.
>>
>> Let me know what you get!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:

>>> Garey,
>>>
>>> I visited a forgotten about old TV repair shop today and acquired the appropriate carbon comp resistors to replace the burnt units stated previously. In addition, I obtained 10 each 6BA6, 12BZ6 and 12BY7A old stock tubes. I could not remember what other tubes were in the radio, so I did not get those, but plan a return trip. I paid $1.00 per tube, was well worth the trip.
>>>
>>> I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
>>>
>>> Thanks,
>>>
>>> Doug N9XTF
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug-
>>>>
>>>> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
>>>> to ground and the resistor goes to 2. Just swap them.
>>>>
>>>> As I said, this is NOT a 'perfect' swap and will affect your AVC
>>>> action. It's really just something you can use to work on the radio
>>>> while you look for a tube if you decide to go for the 12BZ6. The real
>>>> FIX is to put those two filaments in series and add the bypass caps,
>>>> and replace both V5 and V11 with 6 Volt versions.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
>>>>>> was used only in Version 4 of the TR-4. The next versions switched to
>>>>>> a 6BZ6 which is a much more common tube. Succeeding versions used the
>>>>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
>>>>>> changing V5 to a 6BA6. They're right next to each other so it
>>>>>> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic

>>>>>> across each filament (Pins 3 & 4).
>>>>>>
>>>>>> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
>>>>>> Pin 2 and Pin 7, but NOT anidentical tube.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> slowcountry1 wrote:
>>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
>>>>>>>
>>>>>>>
>>>>>>> Regards,
>>>>>>>
>>>>>>> Doug N9XTF
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> ------------------------------------
>>>>>>>
>>>>>>> Yahoo! Groups Links
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>> Garey,
>>>>>
>>>>> Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
>>>>>
>>>>> Thanks,
>>>>>
>>>>> Doug
>>>>>
>>>>>
>>>>>
>>>>> ------------------------------------
>>>>>
>>>>> Yahoo! Groups Links
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13145. Re: [DrakeRadio] TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:23:40 UTC
From: Garey Barrell
Topic: 13140 Message: 13145

If it's between 27000 and 27500, (low 27k!,) it's a version 4. That's what I call a TR-4B. There never wassuch a classification from Drake, but it had the cosmetic features of the B-Line twins. Black lettering, FET PTO, neon fiducial for 'PTO in Use' indicator, two SSB filters, etc. Small changes from that point forward until the 30k range when the one transistor AF preamp was added.

So for a TR-4, pretty good. Most of the bugs were gone and only minor changesthrough until the TR-4C.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

zl1bbw wrote:
> I am looking at a TR4 RV4 AC4 combo that looks in pretty good condx, reported that it is working on 40 not tested on other bands.
>
> Is this a desirable combo in the terms of Drakeology? I have a B & C line already, and like an idiot in a moment of financial strife let 4NT go, silly day.
>
> The serial number is in low 27k series has a black pa cage, copper chassis, the dial has the skirt with khz around it, no noise blanker.
>
> Any idea what is worth/desirability is? and how do they perform? thanks
>
>
>

13146. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:28:57 UTC
From: slowcountry1
Topic: 13108 Message: 13146

Garey,

SN is 26095.

I'm tracing down as much as I can find and still cannot get the 6jb6's to draw any plate current.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug-
>
> I don't think I know the s/n of your TR-4. Versions 7 and 8 added a
> single transistor AF preamp for increased audio. This is about s/n
> 30000 and up. Of course it was carried over to the TR-4C, all versions.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garry,
> >
> > I forgot to mention that the audio output seems low to me. I have to set the volume to about 12 o'clock on a reasonable signal to have it at the correct volume. My 4Cw is about 9 o'clock or less.
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> I would say it was well worth the trip!! :-) Did you buy all of those
> >> tubes?
> >>
> >> If you get nothing in the -x position,how about receive? When you turn
> >> on the Calibrator, and tune from below it,through zero beat and above
> >> it, you should begin to hear a highpitch tone, decreasing to zero
> >> beat, and very little tone above zero beat. Then tuning back low,
> >> switching to the other SIDEBAND and then tuning higher in frequency
> >> again you should hear little or no tone, through zero beat and then an
> >> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
> >> zero beat in the valley 'middle' and then depending upon which filter
> >> you select you should hear ONE of the peaks.
> >>
> >> Let me know what you get!

> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> I visited a forgotten about old TV repair shop today and acquired the appropriate carbon comp resistors to replace the burnt units stated previously. In addition, I obtained 10 each 6BA6, 12BZ6 and 12BY7A old stock tubes. I could not remember what other tubes were in the radio, so I did not get those, but plan a return trip. I paid $1.00 per tube, was well worth the trip.
> >>>
> >>> I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
> >>>
> >>> Thanks,
> >>>
> >>> Doug N9XTF
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug-
> >>>>
> >>>> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
> >>>> to ground and the resistor goes to 2. Just swap them.
> >>>>
> >>>> As I said, this is NOT a 'perfect' swap and will affect your AVC
> >>>> action. It's really just something you can use to work on the radio
> >>>> while you look for a tube if you decide to go for the 12BZ6. The real
> >>>> FIX is to put those two filaments in series and add the bypass caps,
> >>>> and replace both V5 and V11 with 6 Volt versions.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:

> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> Doug -
> >>>>>>
> >>>>>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> >>>>>> was used only in Version 4 of the TR-4. The next versions switched to
> >>>>>> a 6BZ6 which is a much more common tube. Succeeding versions used the
> >>>>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> >>>>>> changing V5 to a 6BA6. They're right next to each other so it
> >>>>>> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> >>>>>> across each filament (Pins 3 & 4).
> >>>>>>
> >>>>>> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> >>>>>> Pin 2 and Pin 7, but NOT anidentical tube.
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>> <www.k4oah.com>
> >>>>>>
> >>>>>> slowcountry1 wrote:
> >>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
> >>>>>>>
> >>>>>>>
> >>>>>>> Regards,
> >>>>>>>
> >>>>>>> Doug N9XTF
> >>>>>>>
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> >>>>>>>
> >>>>>>> ------------------------------------
> >>>>>>>
> >>>>>>> Yahoo! Groups Links
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> >>>>>>>
> >>>>> Garey,
> >>>>>
> >>>>> Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
> >>>>>
> >>>>> Thanks,
> >>>>>

> >>>>> Doug
> >>>>>
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13147. Re: [DrakeRadio] TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:30:27 UTC
From: Ethan Blanton
Topic: 13140 Message: 13147

Garey Barrell spake unto us the following wisdom:
> If it's between 27000 and 27500, (low 27k!,) it's a version 4. That's
> what I call a TR-4B. There never wassuch a classification from Drake,
> but it had the cosmetic features of the B-Line twins. Black lettering,
> FET PTO, neon fiducial for 'PTO in Use' indicator, two SSB filters,
> etc. Small changes from that point forward until the 30k range when
> the one transistor AF preamp was added.

As just another data point, my TR-4 (27521) matches this description,
and as best I can tell is a "TR-4B" above 27500. The PA cage is in
the white, however. It also has a plug-in relay on top of the
chassis, with (as I recall) the socket mounted from below the chassis,
although I'd have to check that to be sure.

I know you and some others keep S/N databases, I'd be happy to check
features and provide any info you might be interested in.

Ethan

13148. Ham Equipment FOR SALE (Fernly NV)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:32:19 UTC
From: Joe
Topic: 13148 Message: 13148

VINTAGE RADIOS FOR SALE!
Please contact the seller direct and not the List Server.

---------- Forwarded Message ----------
From: Ron Skovly <ronskovly@...>
Subject: Equipment FOR SALE
Date: Fri, 12 Apr 2013 22:48:53 -0700

Johnson Ranger 1 (professionally refinished) $395.00

Drake TR-7 Station: $525.00
Includes: TR-7 with: NB-7
500Hz, 1.8KHz, 2.3KHz, 6KHz filters
Aux board
MN-7 Speaker
RV-7 VFO
PS-7 Power Supply

Johnson HT-37 $135.00

National NC-303 with XCU-303 Deluxe calibrator $325.00

Oak Hills Research Classic QRP 20/40 $40.00

These items are pickup only in Fernley, NV

Contact me directly at: 775-815-5260

73
Ron, K7SSB
<ronskovly@...>

[Non-text portions of this message have been removed]

13149. Re: [DrakeRadio] TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 14:57:17 UTC
From: Ethan Blanton
Topic: 13140 Message: 13149

zl1bbw spake unto us the following wisdom:
> I am looking at a TR4 RV4 AC4 combo that looks in pretty good condx,
> reported that it is working on 40 not tested on other bands.
>
> Is this a desirable combo in the terms of Drakeology? I have a B & C
> line already, and like an idiot in a moment of financial strife let
> 4NT go, silly day.
>
> The serial number is in low 27k series has a black pa cage, copper
> chassis, the dial has the skirt with khz around it, no noise blanker.

I should have replied to the OP, too! My TR-4 is 27521, as I
mentioned to Garey, and I love it. It's my daily driver. As I'm sure
many people on the list will tell you, if you're a CW operator you're
going to find the unmodified selectivity a little lacking -- but for
phone, it sounds good, operates easily, is tolerably stable, and
brings back a lot of "oh I had one of those XX years ago, that was a
great rig" nostalgia on the air. ;-)

> Any idea what is worth/desirability is? and how do they perform? thanks

I believe I paid $250 or $275 for a TR-4, RV-4, and AC-4 about two
years ago at a local hamfest, in unknown working but very good
cosmetic condition. I think this is on the low side of an average
price, $250-350 seems plausible to me unless it's a real gem or has
been gone through by a technician you trust. Auction prices often run
quite a bit higher than that, that's a hamfest or face-to-face sale
price. Others may have different opinions and experiences, of
course... I'm in Indiana, so the Drake rig population is thick here.
Not southwest Ohio thick, but maybe thick enough to moderate prices.

Ethan

13150. Re: FS: Ready to Play TR4 System

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 15:08:28 UTC
From: captcurt2000
Topic: 13125 Message: 13150

Hi Garey:

If I recal, it is wired in Ry. I can double check if I need to take it out of its cover again.

It is just a stunning sounding Rx on SSB...

I really hate to sell it but have so many other things going on with 2M EME, and AM Bcst transmitter project, etc, It rarely gets used...and I can use the desk space..better to have it go to someone that will run it more often than I can right now..

Curt
KU8L

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
>
> That is a version 8 of the TR-4, one of the last made. The highest s/n
> I'veseen is 328xx, and the TR-4C started at 34000, leading me to
> believe that the 33000 block was skipped. Perhaps they didn't want
> to start on an odd number! :-)
>
> Does that unit have a plug-in relay under the chassis, or the wired-in
> relay near the power connector?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> captcurt2000 wrote:
> > GA List:
> >
> > Thinning out some of my collection here so have this very nice TR4 system for sale:
> >
> > TR4- Late production unit with the NB knob. Front panel and case is 8.5-9 condition. No case scratches or rust etc. It is the very light-textured powder coat original. Only a couple of faint foot marks from stuff sitting on top of it. Front panel is excellent. LED lighting. VFO is smooth and no jumping. All controls, switches, modes operate quietly and properly. Rig is the best sounding SSB rig I have. Copper is fair to good--no corrosion only some spotting and dust--see pictures.
> >
> > RV4- Remote VFO works as it should. Front panel is good to very good. Standard lighting. Case has been refinished well with paint. Copper is bright and shiny--excellent.

Works perfectly with the TR4 as it should.
> >
> > AC4-R- Standard AC4 with the heathkit shop refit kit installed. Cover is clean and bright. Runs quietly inside the RV-4. Will ship removed from RV-4.
> >
> > This set-up is ready to plug and play--full power and looks as good as it sounds.
> >
> > See photo album here:
https://picasaweb.google.com/captcurt08/TR4RV4AC4R?authkey=Gv1sRgCOHE05Kz0MrnRg
> >
> > Asking $650 and split actual shipping of 3 boxes via Fedex Ground to lower 48
> >
> > Please contact me off list
> >
> > KU8L@...
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
> >
>

13151. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 15:10:47 UTC
From: slowcountry1
Topic: 13108 Message: 13151

I took the following voltage measurements at the pins of the 6JB6s. Bare in mind that the measurements may be useless as I only have a Fluke 289 DMM.

First Number is receive and second is in CW-X and X position for transmit.

1. 250.74 244.11
2. -55.82 -55.20
3. 156.03 0.67
4. 6.5 VAC
5. 12.64 VAC
6. -55.84 -55.22
7. 249.5 242.9
8. NC
9. 156.1 0.263

Regards,

Doug N9XTF
--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
> Garey,
>
> SN is 26095.
>
> I'm tracing down as much as I can find and still cannot get the 6jb6's to draw any plate current.
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doug-
> >
> > I don't think I know the s/n of your TR-4. Versions 7 and 8 added a
> > single transistor AF preamp for increased audio. This is about s/n
> > 30000 and up. Of course it was carried over to the TR-4C, all versions.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > slowcountry1 wrote:
> > > Garry,
> > >
> > > I forgot to mention that the audio output seems low to me. I have to set the volume

to about 12 o'clock on a reasonable signal to have it at the correct volume. My 4Cw is about 9 o'clock or less.
> > >
> > > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Doug -
> > >>
> > >> I would say it was well worth the trip!! :-) Did you buy all of those
> > >> tubes?
> > >>
> > >> If you get nothing in the -x position,how about receive? When you turn
> > >> on the Calibrator, and tune from below it,through zero beat and above
> > >> it, you should begin to hear a highpitch tone, decreasing to zero
> > >> beat, and very little tone above zero beat. Then tuning back low,
> > >> switching to the other SIDEBAND and then tuning higher in frequency
> > >> again you should hear little or no tone, through zero beat and then an
> > >> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
> > >> zero beat in the valley 'middle' and then depending upon which filter
> > >> you select you should hear ONE of the peaks.
> > >>
> > >> Let me know what you get!
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> slowcountry1 wrote:
> > >>> Garey,
> > >>>
> > >>> I visited a forgotten about old TV repair shop today and acquired the appropriate carbon comp resistors to replace the burnt units stated previously. In addition, I obtained 10 each 6BA6, 12BZ6 and 12BY7A old stock tubes. I could not remember what other tubes were in the radio, so I did not get those, but plan a return trip. I paid $1.00 per tube, was well worth the trip.
> > >>>
> > >>> I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
> > >>>
> > >>> Thanks,
> > >>>
> > >>> Doug N9XTF
> > >>>
> > >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:

> > >>>> Doug-
> > >>>>
> > >>>> Yes, you need to reverse the connections on Pins 2 and 7. Now 7 goes
> > >>>> to ground and the resistor goes to 2. Just swap them.
> > >>>>
> > >>>> As I said, this is NOT a 'perfect' swap and will affect your AVC
> > >>>> action. It's really just something you can use to work on the radio
> > >>>> while you look for a tube if you decide to go for the 12BZ6. The real
> > >>>> FIX is to put those two filaments in series and add the bypass caps,
> > >>>> and replace both V5 and V11 with 6 Volt versions.
> > >>>>
> > >>>> 73, Garey - K4OAH
> > >>>> Glen Allen, VA
> > >>>>
> > >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >>>> and TR-4/C Service Supplement CDs
> > >>>> <www.k4oah.com>
> > >>>>
> > >>>> slowcountry1 wrote:
> > >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >>>>>> Doug -
> > >>>>>>
> > >>>>>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> > >>>>>> was used only in Version 4 of the TR-4. The next versions switched to
> > >>>>>> a 6BZ6 which is a much more common tube. Succeeding versions used the
> > >>>>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
> > >>>>>> changing V5 to a 6BA6. They're right next to each other so it
> > >>>>>> shouldn't be too difficult to do. Be sure and put a .005 disc ceramic
> > >>>>>> across each filament (Pins 3 & 4).
> > >>>>>>
> > >>>>>> A 12BA6 will sub for the 12BZ6 if you reverse the connections between
> > >>>>>> Pin 2 and Pin 7, but NOT anidentical tube.
> > >>>>>>
> > >>>>>> 73, Garey - K4OAH
> > >>>>>> Glen Allen, VA
> > >>>>>>
> > >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >>>>>> and TR-4/C Service Supplement CDs
> > >>>>>> <www.k4oah.com>
> > >>>>>>
> > >>>>>> slowcountry1 wrote:
> > >>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now
finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in
its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number
of tubes on hand however, none of them are a 12bz6.
> > >>>>>>>
> > >>>>>>>
> > >>>>>>> Regards,
> > >>>>>>>
> > >>>>>>> Doug N9XTF

> > >>>>>>>
> > >>>>>>>
> > >>>>>>>
> > >>>>>>>
> > >>>>>>> ------------------------------------
> > >>>>>>>
> > >>>>>>> Yahoo! Groups Links
> > >>>>>>>
> > >>>>>>>
> > >>>>>>>
> > >>>>>>>
> > >>>>> Garey,
> > >>>>>
> > >>>>> Ok, here come the stupid questions. Pin 2 connects R50 and Pin 7 connects to ground. So I should ground pin 2, remove R50 and connect R50 to Pin 7 and remove the ground from pin 7?
> > >>>>>
> > >>>>> Thanks,
> > >>>>>
> > >>>>> Doug
> > >>>>>
> > >>>>>
> > >>>>>
> > >>>>> ------------------------------------
> > >>>>>
> > >>>>> Yahoo! Groups Links
> > >>>>>
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>

13152. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 16:29:31 UTC
From: Trevor Liburd
Topic: 13086 Message: 13152

Ok Garey, thanks,

I have 1SS133 these should work also as they are fast switching, but will look around here and see what I can find in the junks radio box,

Yes sub as you to continue T-Sing,

v44kai.....Joel.

On Sat, Apr 13, 2013 at 9:58 AM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> Joel -
>
> That is acommon PIN diode. They are available from several eBay
> suppliers. You 'could' use a 1N4007 as a temporary sub to continue
> troubleshooting.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Trevor Liburd wrote:
> > Found CR403 on up-converter board leaky, I have no such PIN diode in
> stock,
> > what is a close fit for this to common diodes 1N914 etc ?
> >
> > v44kai.....Joel.
> >
> >
> > On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@...> wrote:
> >
> >> **
>
> >>
> >>
> >> I started work again tonight, on the TR-7A, all transistors on the
> exciter
> >> board are good, I did a couple elimination surgery on the parent board,
> and

> >> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
> >> up-converter board,
> >>
> >> The manual I downloaded is missing a page or two, I only have the first
> >> page of the schematic, I'm not seeing the T10+ and some other terminal
> >> lines, anyone have the complete section for the up-converter board? I
> will
> >> appreciate a copy,
> >>
> >> Thanks in advanced,
> >>
> >> v44kai.....Joel.
> >>
> >>
> >> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
> >>> Joel -
> >>>
> >>> AS Jim said, check the +10R and +10T busses. They are marked on the
> >>> parent board and MUST 'toggle' from receiveto transmit. You'll
> >>> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
> >>> Q307 on the Transmit Exciter board.
> >>>
> >>> 73, Garey - K4OAH
> >>> Glen Allen, VA
> >>>
> >>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>> and TR-4/C Service Supplement CDs
> >>> <www.k4oah.com>
> >>>
> >>> Trevor Liburd wrote:
> >>>> Hi Jim,
> >>>>
> >>>> Thanks for responding, I just downloaded the SM for the rig, and will
> >> look
> >>>> at the schematics, anyhow I to the cover off and realized the PA was
> >>>> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I
> >> also
> >>>> noticed the plugging relay in the antenna compartment, is engaging
> >> when I
> >>>> turned the power switch on,
> >>>>
> >>>> Removing the jumper in the right bottom corner of the PA decreases
> that
> >>>> current to just a little over 2 Amps,
> >>>>
> >>>> The plugged in relay doesn't change when the ptt pressed, only the
> feed
> >>>> back cuts out,
> >>>>
> >>>> I will get familiar with the circuit operations and see what I can

> >> find,
> >>>> v44kai.....Joel.
> >>>>
> >>>>
> >>>> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
> >>>>> **
> >>>>>
> >>>>>
> >>>>>
> >>>>> Tap firmly on the radio in various spots. Does the feedback change?
> >> You may
> >>>>> have "dirty" Molex connectors. Check the +10T and +10R voltages to
> >> ensure
> >>>>> they
> >>>>> are switching properly. If not, a switching transistor on the exciter
> >> PCB
> >>>>> may
> >>>>> be defective.
> >>>>>
> >>>>> 73
> >>>>>
> >>>>> -Jim
> >>>>> NU0C
> >>>>>
> >>>>>
> >>>>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
> >>>>>
> >>>>>> Hi all on the group,
> >>>>>> I got home this afternoon from work, got in the shack and turned on
> >> my
> >>>>> ts-940, the TR-7A was on and receiving very well a couple friends
> >> were on
> >>>>> chatting, I the 940 came on, suddenly the TR-7A started with with a
> >>>>> squealing, and didn't stop squealing as it had a feedback in the
> >> speaker,
> >>>>>> now, no receiving of the signals it was, I wonder if for a brief
> >> moment
> >>>>> when the 940 came on, it might have transmitted briefly as it was in
> >> vox
> >>>>> from its last used this morning,
> >>>>>> The frequency and antennas for both rigs are closet enough.
> >>>>>>
> >>>>>> If I turned up the volume the squealing feedback gets louder, and
> > the
> >>>>> S-meter increases with some static in the back ground,
> >>>>>> any idea, experience, possible damage, and of which board, I don't
> >> have
> >>>>> extenders,
> >>>>>> For sure it is not receiving even if I transmit closet to its
> >> frequency,

> >>>>>> Thanks in advanced,
> >>>>>>
> >>>>>>
> >>>>>> v44kai.....Joel.
> >>>>>> What you think guys,
> >>>>>>
> >>>>>>
> >>
> >>
> >
> >
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13153. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 16:54:57 UTC
From: Jim Shorney
Topic: 13086 Message: 13153

I would use the 1N4007 as Garey suggested, if you can find one. The 4007 has a PIN diode structure (the only one of the 1N4000-series that does, I am told). An "ordinary" switching diode may not work well. Let us know, either way.

73

-Jim
NU0C

On Sat, 13 Apr 2013 12:29:31 -0400, Trevor Liburd wrote:

>Ok Garey, thanks,
>
>I have 1SS133 these should work also as they are fast switching, but will
>look around here and see what I can find in the junks radio box,
>
>Yes sub as you to continue T-Sing,
>
>v44kai.....Joel.
>
>
>On Sat, Apr 13, 2013 at 9:58 AM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Joel -
>>
>> That is acommon PIN diode. They are available from several eBay
>> suppliers. You 'could' use a 1N4007 as a temporary sub to continue
>> troubleshooting.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Trevor Liburd wrote:
>> > Found CR403 on up-converter board leaky, I have no such PIN diode in
>> stock,
>> > what is a close fit for this to common diodes 1N914 etc ?
>> >
>> > v44kai.....Joel.

>> >
>> >
>> > On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@...> wrote:
>> >
>> >> **
>>
>> >>
>> >>
>> >> I started work again tonight, on the TR-7A, all transistors on the
>> exciter
>> >> board are good, I did a couple elimination surgery on the parent board,
>> and
>> >> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
>> >> up-converter board,
>> >>
>> >> The manual I downloaded is missing a page or two, I only have the first
>> >> page of the schematic, I'm not seeing the T10+ and some other terminal
>> >> lines, anyone have the complete section for the up-converter board? I
>> will
>> >> appreciate a copy,
>> >>
>> >> Thanks in advanced,
>> >>
>> >> v44kai.....Joel.
>> >>
>> >>
>> >> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> >>> Joel -
>> >>>
>> >>> AS Jim said, check the +10R and +10T busses. They are marked on the
>> >>> parent board and MUST 'toggle' from receiveto transmit. You'll
>> >>> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
>> >>> Q307 on the Transmit Exciter board.
>> >>>
>> >>> 73, Garey - K4OAH
>> >>> Glen Allen, VA
>> >>>
>> >>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> >>> and TR-4/C Service Supplement CDs
>> >>> <www.k4oah.com>
>> >>>
>> >>> Trevor Liburd wrote:
>> >>>> Hi Jim,
>> >>>>
>> >>>> Thanks for responding, I just downloaded the SM for the rig, and will
>> >> look
>> >>>> at the schematics, anyhow I to the cover off and realized the PA was
>> >>>> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I
>> >> also
>> >>>> noticed the plugging relay in the antenna compartment, is engaging

>> >> when I
>> >>>> turned the power switch on,
>> >>>>
>> >>>> Removing the jumper in the right bottom corner of the PA decreases
>> that
>> >>>> current to just a little over 2 Amps,
>> >>>>
>> >>>> The plugged in relay doesn't change when the ptt pressed, only the
>> feed
>> >>>> back cuts out,
>> >>>>
>> >>>> I will get familiar with the circuit operations and see what I can
>> >> find,
>> >>>> v44kai.....Joel.
>> >>>>
>> >>>>
>> >>>> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
>> >>>>> **
>> >>>>>
>> >>>>>
>> >>>>>
>> >>>>> Tap firmly on the radio in various spots. Does the feedback change?
>> >> You may
>> >>>>> have "dirty" Molex connectors. Check the +10T and +10R voltages to
>> >> ensure
>> >>>>> they
>> >>>>> are switching properly. If not, a switching transistor on the exciter
>> >> PCB
>> >>>>> may
>> >>>>> be defective.
>> >>>>>
>> >>>>> 73
>> >>>>>
>> >>>>> -Jim
>> >>>>> NU0C
>> >>>>>
>> >>>>>
>> >>>>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
>> >>>>>
>> >>>>>> Hi all on the group,
>> >>>>>> I got home this afternoon from work, got in the shack and turned on
>> >> my
>> >>>>> ts-940, the TR-7A was on and receiving very well a couple friends
>> >> were on
>> >>>>> chatting, I the 940 came on, suddenly the TR-7A started with with a
>> >>>>> squealing, and didn't stop squealing as it had a feedback in the
>> >> speaker,
>> >>>>>> now, no receiving of the signals it was, I wonder if for a brief
>> >> moment
>> >>>>> when the 940 came on, it might have transmitted briefly as it was in

>> >> vox
>> >>>>> from its last used this morning,
>> >>>>>> The frequency and antennas for both rigs are closet enough.
>> >>>>>>
>> >>>>>> If I turned up the volume the squealing feedback gets louder, and
>> the
>> >>>>> S-meter increases with some static in the back ground,
>> >>>>>> any idea, experience, possible damage, and of which board, I don't
>> >> have
>> >>>>> extenders,
>> >>>>>> For sure it is not receiving even if I transmit closet to its
>> >> frequency,
>> >>>>>> Thanks in advanced,
>> >>>>>>
>> >>>>>>
>> >>>>>> v44kai.....Joel.
>> >>>>>> What you think guys,

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

13154. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 17:44:24 UTC
From: Richard Knoppow
Topic: 13108 Message: 13154

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, April 13, 2013 8:10 AM
Subject: [DrakeRadio] Re: TR-4 Repair

>
> I took the following voltage measurements at the pins of
> the 6JB6s. Bare in mind that the measurements may be
> useless as I only have a Fluke 289 DMM.
>
> First Number is receive and second is in CW-X and X
> position for transmit.
>
> 1. 250.74 244.11
> 2. -55.82 -55.20
> 3. 156.03 0.67
> 4. 6.5 VAC
> 5. 12.64 VAC
> 6. -55.84 -55.22
> 7. 249.5 242.9
> 8. NC
> 9. 156.1 0.263
>
> Regards,
>
> Doug N9XTF

The only voltage that is off here is the cathode
voltage (pin-3) in receive. The plate current meter actually
reads cathode current so I wonder if the lack of indication
is due to something in the metering circuit. I think you
wrote that the T-R relay had been changed. The meter is
switched from RX to TX by this relay. Perhaps its not
connecting. There are two shunts on the meter for TX, R-45
and R-13, which is in parallel as a trimmer. One of them
would have to short to get zero indication and that is
unlikely, usually they go high. I suspect the relay.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13155. Re: [DrakeRadio] TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 17:46:37 UTC
From: Garey Barrell
Topic: 13140 Message: 13155

Ethan -

All the remaining TR-4s were "B"s. None of the TR-4s had plug in
relays, but Drake did sell a retrofit kit with a small PC board that
fit over the chassis feedthroughs and accepted the standard
R10-E1-Y4-V2.5k relay. Version 7 added the NB socket and frontpanel knob.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ethan Blanton wrote:
> Garey Barrell spake unto us the following wisdom:
>> If it's between 27000 and 27500, (low 27k!,) it's a version 4. That's
>> what I call a TR-4B. There never wassuch a classification from Drake,
>> but it had the cosmetic features of the B-Line twins. Black lettering,
>> FET PTO, neon fiducial for 'PTO in Use' indicator, two SSB filters,
>> etc. Small changes from that point forward until the 30k range when
>> the one transistor AF preamp was added.
> As just another data point, my TR-4 (27521) matches this description,
> and as best I can tell is a "TR-4B" above 27500. The PA cage is in
> the white, however. It also has a plug-in relay on top of the
> chassis, with (as I recall) the socket mounted from below the chassis,
> although I'd have to check that to be sure.
>
> I know you and some others keep S/N databases, I'd be happy to check
> features and provide any info you might be interested in.
>
> Ethan
>
>
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> Yahoo! Groups Links
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13156. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 17:49:14 UTC
From: Garey Barrell
Topic: 13108 Message: 13156

Doug -

Do you have 650VDC onthe PA plate caps? If you DO, then the tubes ARE
drawing current (unless they're both defective) and the problem is in
the metering circuit.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> I took the following voltage measurements at the pins of the 6JB6s. Bare in mind that the measurements may be useless as I only have a Fluke 289 DMM.
>
> First Number is receive and second is in CW-X and X position for transmit.
>
> 1. 250.74 244.11
> 2. -55.82 -55.20
> 3. 156.03 0.67
> 4. 6.5 VAC
> 5. 12.64 VAC
> 6. -55.84 -55.22
> 7. 249.5 242.9
> 8. NC
> 9. 156.1 0.263
>
> Regards,
>
> Doug N9XTF
> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>> Garey,
>>
>> SN is 26095.
>>
>> I'm tracing down as much as I can find and still cannot get the 6jb6's to draw any plate current.
>>
>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>> Doug-
>>>
>>> I don't think I know the s/n of your TR-4. Versions 7 and 8 added a
>>> single transistor AF preamp for increased audio. This is about s/n
>>> 30000 and up. Of course it was carried over to the TR-4C, all versions.

>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
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>>>>> on the Calibrator, and tune from below it,through zero beat and above
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>>>>> again you should hear little or no tone, through zero beat and then an
>>>>> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
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>>>>>> I replaced the resistors and placed the 12BZ6 in service. The receiver now works

pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
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>>>>>>> FIX is to put those two filaments in series and add the bypass caps,
>>>>>>> and replace both V5 and V11 with 6 Volt versions.
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>>>>>>>>> changing V5 to a 6BA6. They're right next to each other so it
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>>>>>>>>> slowcountry1 wrote:
>>>>>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
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13157. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 17:51:57 UTC
From: Garey Barrell
Topic: 13086 Message: 13157

The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
the signal path right at the front end, so a common diode may be
problematic.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Ok Garey, thanks,
>
> I have 1SS133 these should work also as they are fast switching, but will
> look around here and see what I can find in the junks radio box,
>
> Yes sub as you to continue T-Sing,
>
> v44kai.....Joel.
>
>
> On Sat, Apr 13, 2013 at 9:58 AM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Joel -
>>
>> That is acommon PIN diode. They are available from several eBay
>> suppliers. You 'could' use a 1N4007 as a temporary sub to continue
>> troubleshooting.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Trevor Liburd wrote:
>>> Found CR403 on up-converter board leaky, I have no such PIN diode in
>> stock,
>>> what is a close fit for this to common diodes 1N914 etc ?
>>>

>>> v44kai.....Joel.
>>>
>>>
>>> On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@...> wrote:
>>>
>>>> **
>>>>
>>>> I started work again tonight, on the TR-7A, all transistors on the
>> exciter
>>>> board are good, I did a couple elimination surgery on the parent board,
>> and
>>>> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
>>>> up-converter board,
>>>>
>>>> The manual I downloaded is missing a page or two, I only have the first
>>>> page of the schematic, I'm not seeing the T10+ and some other terminal
>>>> lines, anyone have the complete section for the up-converter board? I
>> will
>>>> appreciate a copy,
>>>>
>>>> Thanks in advanced,
>>>>
>>>> v44kai.....Joel.
>>>>
>>>>
>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>>>> Joel -
>>>>>
>>>>> AS Jim said, check the +10R and +10T busses. They are marked on the
>>>>> parent board and MUST 'toggle' from receiveto transmit. You'll
>>>>> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
>>>>> Q307 on the Transmit Exciter board.
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> Trevor Liburd wrote:
>>>>>> Hi Jim,
>>>>>>
>>>>>> Thanks for responding, I just downloaded the SM for the rig, and will
>>>> look
>>>>>> at the schematics, anyhow I to the cover off and realized the PA was
>>>>>> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I
>>>> also
>>>>>> noticed the plugging relay in the antenna compartment, is engaging
>>>> when I

>>>>>> turned the power switch on,
>>>>>>
>>>>>> Removing the jumper in the right bottom corner of the PA decreases
>> that
>>>>>> current to just a little over 2 Amps,
>>>>>>
>>>>>> The plugged in relay doesn't change when the ptt pressed, only the
>> feed
>>>>>> back cuts out,
>>>>>>
>>>>>> I will get familiar with the circuit operations and see what I can
>>>> find,
>>>>>> v44kai.....Joel.
>>>>>>
>>>>>>
>>>>>> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
>>>>>>> **
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>> Tap firmly on the radio in various spots. Does the feedback change?
>>>> You may
>>>>>>> have "dirty" Molex connectors. Check the +10T and +10R voltages to
>>>> ensure
>>>>>>> they
>>>>>>> are switching properly. If not, a switching transistor on the exciter
>>>> PCB
>>>>>>> may
>>>>>>> be defective.
>>>>>>>
>>>>>>> 73
>>>>>>>
>>>>>>> -Jim
>>>>>>> NU0C
>>>>>>>
>>>>>>>
>>>>>>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
>>>>>>>
>>>>>>>> Hi all on the group,
>>>>>>>> I got home this afternoon from work, got in the shack and turned on
>>>> my
>>>>>>> ts-940, the TR-7A was on and receiving very well a couple friends
>>>> were on
>>>>>>> chatting, I the 940 came on, suddenly the TR-7A started with with a
>>>>>>> squealing, and didn't stop squealing as it had a feedback in the
>>>> speaker,
>>>>>>>> now, no receiving of the signals it was, I wonder if for a brief
>>>> moment
>>>>>>> when the 940 came on, it might have transmitted briefly as it was in
>>>> vox

>>>>>>> from its last used this morning,
>>>>>>>> The frequency and antennas for both rigs are closet enough.
>>>>>>>>
>>>>>>>> If I turned up the volume the squealing feedback gets louder, and
>> the
>>>>>>> S-meter increases with some static in the back ground,
>>>>>>>> any idea, experience, possible damage, and of which board, I don't
>>>> have
>>>>>>> extenders,
>>>>>>>> For sure it is not receiving even if I transmit closet to its
>>>> frequency,
>>>>>>>> Thanks in advanced,
>>>>>>>>
>>>>>>>>
>>>>>>>> v44kai.....Joel.
>>>>>>>> What you think guys,
>>>>>>>>
>>>>>>>>
>>>>
>>>
>>
>>
>
>

13158. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:07:18 UTC
From: slowcountry1
Topic: 13108 Message: 13158

Garey,

I have 679VDC measured at the top of all three 6JB6 tubes.

Doug

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Do you have 650VDC onthe PA plate caps? If you DO, then the tubes ARE
> drawing current (unless they're both defective) and the problem is in
> the metering circuit.
>
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>> 30000 and up. Of course it was carried over to the TR-4C, all versions.
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> >>>>> If you get nothing in the -x position,how about receive? When you turn
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> >>>>> beat, and very little tone above zero beat. Then tuning back low,
> >>>>> switching to the other SIDEBAND and then tuning higher in frequency
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> >>>>>>>>> Yeah, unfortunately the 12BZ6 is a pretty rare (expensive) tube. It
> >>>>>>>>> was used only in Version 4 of the TR-4. The next versions switched to
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> >>>>>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
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> >>>>>>>>>> Regards,
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> >>>>>>>>>> Doug N9XTF
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> >>>>>>>>>>
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13159. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:19:29 UTC
From: Richard Knoppow
Topic: 13108 Message: 13159

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, April 13, 2013 10:49 AM
Subject: Re: [DrakeRadio] Re: TR-4 Repair

> Doug -
>
> Do you have 650VDC onthe PA plate caps? If you DO, then
> the tubes ARE
> drawing current (unless they're both defective) and the
> problem is in
> the metering circuit.
>
> 73, Garey - K4OAH
> Glen Allen, VA

I thought to ask this also but he was getting so much
cathode current that the plate voltage _had_ to be there. I
don't think the screens could draw that much current, at
least not for long.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13160. Re: [DrakeRadio] TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:21:33 UTC
From: Ethan Blanton
Topic: 13140 Message: 13160

Garey,

Garey Barrell spake unto us the following wisdom:
> All the remaining TR-4s were "B"s. None of the TR-4s had plug in
> relays, but Drake did sell a retrofit kit with a small PC board that
> fit over the chassis feedthroughs and accepted the standard
> R10-E1-Y4-V2.5k relay. Version 7 added the NB socket and frontpanel knob.

Thank you for clarifying the "B" situation. Mine is too old to have a noise blanker socket or knob. I rather wish that Drake had included revision numbers somewhere! Of course, by 2013, so many rigs have had various hands in them that who knows what you may find, anyway...

I remembered a nice, large, rectangular hole in my chassis under the relay, so I went and looked to see what I was recalling. Mine does have the PCB conversion that you mention. There is indeed a large (maybe 1" x 1.5" or so) rectangular hole, but it is not precisely under the relay and it just has two or three wires passing up through it. Perhaps it was used for something before the conversion? It appears that the conversion in my TR-4 was not performed by the factory (if they even offered such a service), as the soldering job on the PCB looks a bit dodgy compared to the rest of the rig, or my other Drake items. (Though my 2-NT has some skechy work in it, as well, perhaps the aforementioned various hands have been mucking about in it!)

Ethan

13161. L7 Linear fan

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:34:37 UTC
From: Max Cotton
Topic: 13161 Message: 13161

This afternoon my L-7 has decided to get really noisy in the fan department, without looking into this is there a drop in quiet replacement available?
73 Max
M0GHQ

[Non-text portions of this message have been removed]

13162. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:34:54 UTC
From: Garey Barrell
Topic: 13108 Message: 13162

Doug -

OK. Well, again, the tubes ARE drawing current. The Cathode voltage tends to float up with the return is lifted, (relay in Receive,) and go to near 0 when the relay goes to Transmit. Either your meter is defective, or the meter shunt (R45) is shorted, or the meter switch (front panel) is defective.

I would try exercising the switch to see if it's just not closing in the Plate position (pushed in).

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
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13163. Re: [DrakeRadio] Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:38:43 UTC
From: Garey Barrell
Topic: 13108 Message: 13163

OOPS! The front panel meter switch should read PLATE current in the
OUT (spring driven) position.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> (front panel) is defective.
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> the Plate position (pushed in).
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13164. Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 18:47:55 UTC
From: slowcountry1
Topic: 13108 Message: 13164

Garey,

I put a know good set of tubes in the rig, no Tx output on wattmeter. I changed out the enclosed relay with a new one. No output on wattmeter.

Any other ideas?

Thanks to all on the list for the assistance.

Doug.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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> OOPS! The front panel meter switch should read PLATE current in the
> OUT (spring driven) position.
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> >>>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>>>>>>>>>>> <www.k4oah.com>
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> >>>>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>>>> About 10 years ago, I acquired a TR-4 that was in need of repair. I am now finally getting around to working on it. V11 calls for a 12bz6. Someone had stuck a 6bz6 in its place and looks burned up. Is there a direct replacement for the 12bz6? I have a number of tubes on hand however, none of them are a 12bz6.
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> >>>>>>>>>>>>>
> >>>>>>>>>>>>> Regards,
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> Doug N9XTF
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13165. L7 fan

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 19:00:04 UTC
From: Chgypsy@...
Topic: 13165 Message: 13165

Hi, If I recall correctly Evan of linear renown, has had a series of emails at various times on both this list and on the other Drake list about both L4 and L7 fans and what he was using to replace them, sources and models.
Carl wd8nhk

[Non-text portions of this message have been removed]

13166. Re: [DrakeRadio] Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 19:08:29 UTC
From: Garey Barrell
Topic: 13108 Message: 13166

Doug -

Again, the problem is NOT with the tubes. The relay IS closing as
evidenced by the Cathode voltage reading on the PA.

Either the panel switch is not closing in the 'normal' OUT position,
the meter is defective, or the meter shunt (R45) is shorted or
associated wiring is incorrect.

With the applied (measured) PA tube voltages you provided, the PA
tubes ARE drawing current. You may have other signal problems, but
until you can set the PA idle current to 0.1A with the BIAS control,
you are not going to get any output.!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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slowcountry1 wrote:
> Garey,
>
> I put a know good set of tubes in the rig, no Tx output on wattmeter. I changed out the
enclosed relay with a new one. No output on wattmeter.
>
> Any other ideas?
>
> Thanks to all on the list for the assistance.
>
> Doug.
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> OOPS! The front panel meter switch should read PLATE current in the
>> OUT (spring driven) position.
>>
>> 73, Garey - K4OAH
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>> Garey Barrell wrote:
>>> Doug -

>>>
>>> OK. Well, again, the tubes ARE drawing current. The Cathode voltage
>>> tends to float up with the return is lifted, (relay in Receive,) and
>>> go to near 0 when the relay goes to Transmit. Either your meter is
>>> defective, or the meter shunt (R45) is shorted, or the meter switch
>>> (front panel) is defective.
>>>
>>> I would try exercising the switch to see if it's just not closing in
>>> the Plate position (pushed in).
>>>
>>> 73, Garey - K4OAH
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>>> slowcountry1 wrote:
>>>> Garey,
>>>>
>>>> I have 679VDC measured at the top of all three 6JB6 tubes.
>>>>
>>>> Doug
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>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>> Doug -
>>>>>
>>>>> Do you have 650VDC onthe PA plate caps? If you DO, then the tubes ARE
>>>>> drawing current (unless they're both defective) and the problem is in
>>>>> the metering circuit.
>>>>>
>>>>> 73, Garey - K4OAH
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>>>>> slowcountry1 wrote:
>>>>>> I took the following voltage measurements at the pins of the 6JB6s. Bare in mind
that the measurements may be useless as I only have a Fluke 289 DMM.
>>>>>>
>>>>>> First Number is receive and second is in CW-X and X position for transmit.
>>>>>>
>>>>>> 1. 250.74 244.11
>>>>>> 2. -55.82 -55.20
>>>>>> 3. 156.03 0.67
>>>>>> 4. 6.5 VAC
>>>>>> 5. 12.64 VAC
>>>>>> 6. -55.84 -55.22

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>>>>>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
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>>>>>>> SN is 26095.
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>>>>>>> I'm tracing down as much as I can find and still cannot get the 6jb6's to draw any plate current.
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>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>> Doug-
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>>>>>>>>> I don't think I know the s/n of your TR-4. Versions 7 and 8 added a
>>>>>>>>> single transistor AF preamp for increased audio. This is about s/n
>>>>>>>>> 30000 and up. Of course it was carried over to the TR-4C, all versions.
>>>>>>>>>
>>>>>>>>> 73, Garey - K4OAH
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>>>>>>>>>
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>>>>>>>>>>>>> I would say it was well worth the trip!! :-) Did you buy all of those
>>>>>>>>>>>>> tubes?
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>>>>>>>>>>>>> If you get nothing in the -x position,how about receive? When you turn
>>>>>>>>>>>>> on the Calibrator, and tune from below it,through zero beat and above
>>>>>>>>>>>>> it, you should begin to hear a highpitch tone, decreasing to zero
>>>>>>>>>>>>> beat, and very little tone above zero beat. Then tuning back low,
>>>>>>>>>>>>> switching to the other SIDEBAND and then tuning higher in frequency
>>>>>>>>>>>>> again you should hear little or no tone, through zero beat and then an
>>>>>>>>>>>>> increasing pitch up to 2500 Hz or so. Think of the letter "M" with
>>>>>>>>>>>>> zero beat in the valley 'middle' and then depending upon which filter

>>>>>>>>>> you select you should hear ONE of the peaks.
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>>>>>>>>>> Let me know what you get!
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>>>>>>>>>>>
>>>>>>>>>>> I replaced the resistors and placed the 12BZ6 in service. The receiver now works pretty well, a little low on sensitivity, but not bad. I am however unable to get the unit to transmit. All tubes are lit. I can turn the switch to CW Tune and set the bias for 100ma. If I set the switch to X, I am unable to obtain any plate current. Both relays close and I get the CW tone however; it is very quiet. The relay in the PA cage has been replaced with a board and an enclosed relay and the "protection bulb" is gone. It appears that the old open frame relay was replaced by a factory upgrade? Can you point me in a direction to start troubleshooting the transmit issue?
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>>>>>>>>>>>> As I said, this is NOT a 'perfect' swap and will affect your AVC
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>>>>>>>>>>>>> 6BZ6 by rewiring the V5 socket (12BA6) in series with V11, and
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13167. Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 19:27:24 UTC
From: slowcountry1
Topic: 13108 Message: 13167

Garey,

I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.

Thanks,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Again, the problem is NOT with the tubes. The relay IS closing as
> evidenced by the Cathode voltage reading on the PA.
>
> Either the panel switch is not closing in the 'normal' OUT position,
> the meter is defective, or the meter shunt (R45) is shorted or
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> With the applied (measured) PA tube voltages you provided, the PA
> tubes ARE drawing current. You may have other signal problems, but
> until you can set the PA idle current to 0.1A with the BIAS control,
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> > Any other ideas?
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> > Thanks to all on the list for the assistance.
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13168. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 19:43:27 UTC
From: Garey Barrell
Topic: 13108 Message: 13168

Doug -

OK, I guess I missed that. Based on your measurements I calculate 96 mA so that's pretty close! :-)

So. Refresh the problem.

If you switch to CW-TUNE, in the non -X position, you can adjust the BIAS correctly.

If you switch to -X, key the transmitter (or unplug the key) do you see the idle current? If you increase the XMTR GAIN and peak the RF TUNE control do you get any increase in plate current? If you are on 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a separate receiver? If you DO heara signal at 7.000 peak the RF TUNE for maximum signal onthe receiver.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
>
> Thanks,
>
> Doug N9XTF
>
>

13169. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:10:54 UTC
From: slowcountry1
Topic: 13108 Message: 13169

Garey,

With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.

I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> OK, I guess I missed that. Based on your measurements I calculate 96
> mA so that's pretty close! :-)
>
> So. Refresh the problem.
>
> If you switch to CW-TUNE, in the non -X position, you can adjust the
> BIAS correctly.
>
> If you switch to -X, key the transmitter (or unplug the key) do you
> see the idle current? If you increase the XMTR GAIN and peak the RF
> TUNE control do you get any increase in plate current? If you are on
> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
> for maximum signal onthe receiver.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I

switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
> >
> > Thanks,
> >
> > Doug N9XTF
> >
> >
>

13170. Re: [DrakeRadio] Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:11:05 UTC
From: Richard Knoppow
Topic: 13108 Message: 13170

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, April 13, 2013 11:47 AM
Subject: [DrakeRadio] Re: TR-4 Repair (oops!)

> Garey,
>
> I put a know good set of tubes in the rig, no Tx output on
> wattmeter. I changed out the enclosed relay with a new
> one. No output on wattmeter.
>
> Any other ideas?
>
> Thanks to all on the list for the assistance.
>
> Doug.

Just to clarify this, is the wattmeter an external one
or the tuning wattmeter in the receiver?

Also, if I understand correctly, you can set the
resting current on the finals with the bias adjustment but
do not seen plate current when transmitting, is this
correct?
I am also not sure if you get no power out in any mode,
again the means of measuring the output is important. I was
mistaken about the relay contacts in the meter circuit. It
was an optical illusion from looking at the schematic on my
computer. The relay is shown below the meter switch for
plate current or output. This switch could be bad which
might account for the meter not working at all, as would a
bad meter but the meter is OK if you can read bias. It
might account for not seeing output if you are not using an
external power meter but not otherwise.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13171. Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:27:28 UTC
From: slowcountry1
Topic: 13108 Message: 13171

Richard,

Setup is as follows;

TR-4 connected to a W4 wattmeter connected to either a dummy load or Hustler 5BTV. I am watching the external wattmeter for power output from the TR-4. When I switch to X-CW and sideband to X, the rig keys, the plate current meter shows .1 and does not change with xmtr gain adjustments and rf tune adjustments; no output is seen on the external W4.

Placing the switch in x-cw and the sideband switch in the non x position allows me to set the bias current to .1 on the plate meter.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, April 13, 2013 11:47 AM
> Subject: [DrakeRadio] Re: TR-4 Repair (oops!)
>
>
> > Garey,
> >
> > I put a know good set of tubes in the rig, no Tx output on
> > wattmeter. I changed out the enclosed relay with a new
> > one. No output on wattmeter.
> >
> > Any other ideas?
> >
> > Thanks to all on the list for the assistance.
> >
> > Doug.
>
> Just to clarify this, is the wattmeter an external one
> or the tuning wattmeter in the receiver?
>
> Also, if I understand correctly, you can set the
> resting current on the finals with the bias adjustment but
> do not seen plate current when transmitting, is this
> correct?
> I am also not sure if you get no power out in any mode,

> again the means of measuring the output is important. I was
> mistaken about the relay contacts in the meter circuit. It
> was an optical illusion from looking at the schematic on my
> computer. The relay is shown below the meter switch for
> plate current or output. This switch could be bad which
> might account for the meter not working at all, as would a
> bad meter but the meter is OK if you can read bias. It
> might account for not seeing output if you are not using an
> external power meter but not otherwise.
>
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

13172. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:32:36 UTC
From: Garey Barrell
Topic: 13108 Message: 13172

Doug -

OK, that's good. So we have a signal, we just have to amplify it and
get it to the PA!

Check the DC voltages on V6.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
>
> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
>
> Regards,
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> OK, I guess I missed that. Based on your measurements I calculate 96
>> mA so that's pretty close! :-)
>>
>> So. Refresh the problem.
>>
>> If you switch to CW-TUNE, in the non -X position, you can adjust the
>> BIAS correctly.
>>
>> If you switch to -X, key the transmitter (or unplug the key) do you
>> see the idle current? If you increase the XMTR GAIN and peak the RF
>> TUNE control do you get any increase in plate current? If you are on

>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
>> for maximum signal onthe receiver.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
>>>
>>> Thanks,
>>>
>>> Doug N9XTF
>>>
>>>

13173. Re: [DrakeRadio] Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:34:03 UTC
From: Richard Knoppow
Topic: 13108 Message: 13173

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, April 13, 2013 1:27 PM
Subject: [DrakeRadio] Re: TR-4 Repair (oops!)

>
> Richard,
>
> Setup is as follows;
>
> TR-4 connected to a W4 wattmeter connected to either a
> dummy load or Hustler 5BTV. I am watching the external
> wattmeter for power output from the TR-4. When I switch
> to X-CW and sideband to X, the rig keys, the plate current
> meter shows .1 and does not change with xmtr gain
> adjustments and rf tune adjustments; no output is seen on
> the external W4.
>
> Placing the switch in x-cw and the sideband switch in the
> non x position allows me to set the bias current to .1 on
> the plate meter.
>
> Regards,
>
> Doug N9XTF

OK, thanks, I was somewhat confused because there have
been a lot of TR-4 posts lately. Is this the same one that
had the wrong tube in it? If so I wonder if that has
anything to do with this.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13174. Re: TR4 & RV4 & AC4 what are they like, desirable?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:41:25 UTC
From: zl1bbw
Topic: 13140 Message: 13174

--- In DrakeRadio@yahoogroups.com, "zl1bbw" <calf4u@...> wrote:
>
> I am looking at a TR4 RV4 AC4 combo that looks in pretty good condx, reported that it is working on 40 not tested on other bands.
>
> Is this a desirable combo in the terms of Drakeology? I have a B & C line already, and like an idiot in a moment of financial strife let 4NT go, silly day.
>
> The serial number is in low 27k series has a black pa cage, copper chassis, the dial has the skirt with khz around it, no noise blanker.
>
> Any idea what is worth/desirability is? and how do they perform? thanks
>

Thanks for all the info. The s/n is 27012 or near that, so sounds like a "B" am mainly CW but use the B line for that.

A friend in the UK keeps on at me to buy some new gear, but it is so expensive in NZ its unreal and no back up service of any value, so why should I get a FT1000 or better at 10 times the price and zero times the repairability. Reckon the best place to spend money is up in air on antennas. Will see if I can catch this one, and report back.

A good Datong audio filter sorts out many of the audio issues.

Also not a great Ham population up here, think I am the only one on HF within 30 or 40 miles, so no nearby problems.

13175. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 20:59:57 UTC
From: slowcountry1
Topic: 13108 Message: 13175

Garey,

Driver tube V6 voltages as follows;

1. 157 2.8
2. 0
3. Not connected
4. 0
5. 0
6. 6.408 VAC
7. 252 236
8. 253 164

First number receive second number transmit.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> OK, that's good. So we have a signal, we just have to amplify it and
> get it to the PA!
>
> Check the DC voltages on V6.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
> >
> > I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on

the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
> >
> > Regards,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> OK, I guess I missed that. Based on your measurements I calculate 96
> >> mA so that's pretty close! :-)
> >>
> >> So. Refresh the problem.
> >>
> >> If you switch to CW-TUNE, in the non -X position, you can adjust the
> >> BIAS correctly.
> >>
> >> If you switch to -X, key the transmitter (or unplug the key) do you
> >> see the idle current? If you increase the XMTR GAIN and peak the RF
> >> TUNE control do you get any increase in plate current? If you are on
> >> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> >> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
> >> for maximum signal onthe receiver.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
> >>>
> >>> Thanks,
> >>>
> >>> Doug N9XTF
> >>>
> >>>
>

13176. Re: TR-4 Repair (oops!)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 21:01:16 UTC
From: slowcountry1
Topic: 13108 Message: 13176

Richard,

Yes, this had the 6V tube where a 12V tube was supposed to be.

Regards,

Doug

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, April 13, 2013 1:27 PM
> Subject: [DrakeRadio] Re: TR-4 Repair (oops!)
>
>
> >
> > Richard,
> >
> > Setup is as follows;
> >
> > TR-4 connected to a W4 wattmeter connected to either a
> > dummy load or Hustler 5BTV. I am watching the external
> > wattmeter for power output from the TR-4. When I switch
> > to X-CW and sideband to X, the rig keys, the plate current
> > meter shows .1 and does not change with xmtr gain
> > adjustments and rf tune adjustments; no output is seen on
> > the external W4.
> >
> > Placing the switch in x-cw and the sideband switch in the
> > non x position allows me to set the bias current to .1 on
> > the plate meter.
> >
> > Regards,
> >
> > Doug N9XTF
>
> OK, thanks, I was somewhat confused because there have
> been a lot of TR-4 posts lately. Is this the same one that
> had the wrong tube in it? If so I wonder if that has
> anything to do with this.
>
>
> --

> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

13177. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 21:38:51 UTC
From: Trevor Liburd
Topic: 13086 Message: 13177

Hi guys,

Found some 1N-4937 that I use to use in my TV and VCR repairs, a long time ago, they are Schottky rectifier fast speed switching, that worked so far, and the receiver is back to life,

I will run the rx a while before I connect back the components in the PA unit to make sure that the PA works, will keep you'll updated,

v44kai.....Joel.

On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
> the signal path right at the front end, so a common diode may be
> problematic.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Trevor Liburd wrote:
> > Ok Garey, thanks,
> >
> > I have 1SS133 these should work also as they are fast switching, but will
> > look around here and see what I can find in the junks radio box,
> >
> > Yes sub as you to continue T-Sing,
> >
> > v44kai.....Joel.
> >
> >
> > On Sat, Apr 13, 2013 at 9:58 AM, Garey Barrell <k4oah@...>
> wrote:
> >
> >> **
>
>>
> >>
> >>

> >> Joel -
> >>
> >> That is acommon PIN diode. They are available from several eBay
> >> suppliers. You 'could' use a 1N4007 as a temporary sub to continue
> >> troubleshooting.
> >>
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> Trevor Liburd wrote:
> >>> Found CR403 on up-converter board leaky, I have no such PIN diode in
> >> stock,
> >>> what is a close fit for this to common diodes 1N914 etc ?
> >>>
> >>> v44kai.....Joel.
> >>>
> >>>
> >>> On Fri, Apr 12, 2013 at 11:38 PM, <v44kai@gmail.com> wrote:
> >>>
> >>>> **
> >>>>
> >>>> I started work again tonight, on the TR-7A, all transistors on the
> >> exciter
> >>>> board are good, I did a couple elimination surgery on the parent
> board,
> >> and
> >>>> all indicate the 8.3v on the T10+ buss in RX mode is coming from the
> >>>> up-converter board,
> >>>>
> >>>> The manual I downloaded is missing a page or two, I only have the
> first
> >>>> page of the schematic, I'm not seeing the T10+ and some other terminal
> >>>> lines, anyone have the complete section for the up-converter board? I
> >> will
> >>>> appreciate a copy,
> >>>>
> >>>> Thanks in advanced,
> >>>>
> >>>> v44kai.....Joel.
> >>>>
> >>>>
> >>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
> >>>>> Joel -
> >>>>>
> >>>>> AS Jim said, check the +10R and +10T busses. They are marked on the

> >>>>> parent board and MUST 'toggle' from receiveto transmit. You'll
> >>>>> probably find one that is 0 V in R or T. The 'Fusistors' are Q306 and
> >>>>> Q307 on the Transmit Exciter board.
> >>>>>
> >>>>> 73, Garey - K4OAH
> >>>>> Glen Allen, VA
> >>>>>
> >>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>> and TR-4/C Service Supplement CDs
> >>>>> <www.k4oah.com>
> >>>>>
> >>>>> Trevor Liburd wrote:
> >>>>>> Hi Jim,
> >>>>>>
> >>>>>> Thanks for responding, I just downloaded the SM for the rig, and
> will
> >>>> look
> >>>>>> at the schematics, anyhow I to the cover off and realized the PA was
> >>>>>> getting warm, and was drawing over 3 Amps, on my 3 Amp Lab supply, I
> >>>> also
> >>>>>> noticed the plugging relay in the antenna compartment, is engaging
> >>>> when I
> >>>>>> turned the power switch on,
> >>>>>>
> >>>>>> Removing the jumper in the right bottom corner of the PA decreases
> >> that
> >>>>>> current to just a little over 2 Amps,
> >>>>>>
> >>>>>> The plugged in relay doesn't change when the ptt pressed, only the
> >> feed
> >>>>>> back cuts out,
> >>>>>>
> >>>>>> I will get familiar with the circuit operations and see what I can
> >>>> find,
> >>>>>> v44kai.....Joel.
> >>>>>>
> >>>>>>
> >>>>>> On Wed, Apr 10, 2013 at 11:20 PM, Jim Shorney <jshorney@...>wrote:
> >>>>>>> **
> >>>>>>>
> >>>>>>>
> >>>>>>>
> >>>>>>> Tap firmly on the radio in various spots. Does the feedback change?
> >>>> You may
> >>>>>>> have "dirty" Molex connectors. Check the +10T and +10R voltages to
> >>>> ensure
> >>>>>>> they
> >>>>>>> are switching properly. If not, a switching transistor on the
> exciter
> >>>> PCB

> >>>>>>> may
> >>>>>>> be defective.
> >>>>>>>
> >>>>>>> 73
> >>>>>>>
> >>>>>>> -Jim
> >>>>>>> NU0C
> >>>>>>>
> >>>>>>>
> >>>>>>> On Wed, 10 Apr 2013 21:58:24 -0000, v44kai@... wrote:
> >>>>>>>
> >>>>>>>> Hi all on the group,
> >>>>>>>> I got home this afternoon from work, got in the shack and turned
> on
> >>>> my
> >>>>>>> ts-940, the TR-7A was on and receiving very well a couple friends
> >>>> were on
> >>>>>>> chatting, I the 940 came on, suddenly the TR-7A started with with a
> >>>>>>> squealing, and didn't stop squealing as it had a feedback in the
> >>>> speaker,
> >>>>>>>> now, no receiving of the signals it was, I wonder if for a brief
> >>>> moment
> >>>>>>> when the 940 came on, it might have transmitted briefly as it was
> in
> >>>> vox
> >>>>>>> from its last used this morning,
> >>>>>>>> The frequency and antennas for both rigs are closet enough.
> >>>>>>>>
> >>>>>>>> If I turned up the volume the squealing feedback gets louder, and
> >> the
> >>>>>>> S-meter increases with some static in the back ground,
> >>>>>>>> any idea, experience, possible damage, and of which board, I don't
> >>>> have
> >>>>>>> extenders,
> >>>>>>>> For sure it is not receiving even if I transmit closet to its
> >>>> frequency,
> >>>>>>>> Thanks in advanced,
> >>>>>>>>
> >>>>>>>>
> >>>>>>>> v44kai.....Joel.
> >>>>>>>> What you think guys,
> >>>>>>>>
> >>>>>>>>
> >>>>
> >>>
> >>
> >>
> >
> >
>

>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13178. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 21:41:54 UTC
From: Garey Barrell
Topic: 13108 Message: 13178

OK, DC levels look good. Check voltages on V4. This should eliminate
any DC problems.

V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Driver tube V6 voltages as follows;
>
> 1. 157 2.8
> 2. 0
> 3. Not connected
> 4. 0
> 5. 0
> 6. 6.408 VAC
> 7. 252 236
> 8. 253 164
>
> First number receive second number transmit.
>
> Regards,
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> OK, that's good. So we have a signal, we just have to amplify it and
>> get it to the PA!
>>
>> Check the DC voltages on V6.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>

>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
>>>
>>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
>>>
>>> Regards,
>>>
>>> Doug N9XTF
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>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> OK, I guess I missed that. Based on your measurements I calculate 96
>>>> mA so that's pretty close! :-)
>>>>
>>>> So. Refresh the problem.
>>>>
>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
>>>> BIAS correctly.
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>>>> If you switch to -X, key the transmitter (or unplug the key) do you
>>>> see the idle current? If you increase the XMTR GAIN and peak the RF
>>>> TUNE control do you get any increase in plate current? If you are on
>>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
>>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
>>>> for maximum signal onthe receiver.
>>>>
>>>> 73, Garey - K4OAH
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>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>
>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did

when I started working on the receiver section.
>>>>>
>>>>> Thanks,
>>>>>
>>>>> Doug N9XTF
>>>>>
>>>>>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

13179. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 21:46:09 UTC
From: Garey Barrell
Topic: 13086 Message: 13179

You won't know until you check sensitivity, but certainly good enough
to keep troubleshooting!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Hi guys,
>
> Found some 1N-4937 that I use to use in my TV and VCR repairs, a long time
> ago, they are Schottky rectifier fast speed switching, that worked so far,
> and the receiver is back to life,
>
> I will run the rx a while before I connect back the components in the PA
> unit to make sure that the PA works, will keep you'll updated,
>
> v44kai.....Joel.
>
>
> On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
>> the signal path right at the front end, so a common diode may be
>> problematic.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>>

13180. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 22:03:43 UTC
From: Trevor Liburd
Topic: 13086 Message: 13180

Ok good Garey, I should have a few 4007 somewhere, will look later tonight when I returned home, remember Garey I can't nowhere on the island to purchase electronic component,

Thanks,

v44kai.....Joel

On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> You won't know until you check sensitivity, but certainly good enough
> to keep troubleshooting!
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Trevor Liburd wrote:
> > Hi guys,
> >
> > Found some 1N-4937 that I use to use in my TV and VCR repairs, a long
> time
> > ago, they are Schottky rectifier fast speed switching, that worked so
> far,
> > and the receiver is back to life,
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> > I will run the rx a while before I connect back the components in the PA
> > unit to make sure that the PA works, will keep you'll updated,
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> > v44kai.....Joel.
> >
> >
> > On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...>
> wrote:
> >
> >> **
>
> >>
> >> >>
> >> >>

> >> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
> >> the signal path right at the front end, so a common diode may be
> >> problematic.
> >>
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >>
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13181. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-13 22:22:33 UTC
From: slowcountry1
Topic: 13108 Message: 13181

V4

1. 160 2.0
2. 0
3. NC
4. 6.35VAC
5. tied to ground
6. 0
7. 226 230
8. 161 148

First number receive second number transmit

The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> OK, DC levels look good. Check voltages on V4. This should eliminate
> any DC problems.
>
> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > Driver tube V6 voltages as follows;
> >
> > 1. 157 2.8
> > 2. 0
> > 3. Not connected
> > 4. 0
> > 5. 0
> > 6. 6.408 VAC
> > 7. 252 236

> > 8. 253 164
> >
> > First number receive second number transmit.
> >
> > Regards,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> OK, that's good. So we have a signal, we just have to amplify it and
> >> get it to the PA!
> >>
> >> Check the DC voltages on V6.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
> >>>
> >>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
> >>>
> >>> Regards,
> >>>
> >>> Doug N9XTF
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> OK, I guess I missed that. Based on your measurements I calculate 96
> >>>> mA so that's pretty close! :-)
> >>>>
> >>>> So. Refresh the problem.
> >>>>
> >>>> If you switch to CW-TUNE, in the non -X position, you can adjust the

> >>>> BIAS correctly.
> >>>>
> >>>> If you switch to -X, key the transmitter (or unplug the key) do you
> >>>> see the idle current? If you increase the XMTR GAIN and peak the RF
> >>>> TUNE control do you get any increase in plate current? If you are on
> >>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> >>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
> >>>> for maximum signal onthe receiver.
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> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>>>
> >>>> slowcountry1 wrote:
> >>>>> Garey,
> >>>>>
> >>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
> >>>>>
> >>>>> Thanks,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>>
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
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> >

13182. Re: [DrakeRadio] Ham Equipment FOR SALE (Fernly NV)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 01:57:21 UTC
From: Robert Logan
Topic: 13148 Message: 13182

Hallicrafters made the HT-37, not Johnson

Sent from my iPhone

On Apr 13, 2013, at 9:32 AM, Joe <WA6RKN@...> wrote:

VINTAGE RADIOS FOR SALE!
Please contact the seller direct and not the List Server.

---------- Forwarded Message ----------
From: Ron Skovly <ronskovly@...>
Subject: Equipment FOR SALE
Date: Fri, 12 Apr 2013 22:48:53 -0700

Johnson Ranger 1 (professionally refinished) $395.00

Drake TR-7 Station: $525.00
Includes: TR-7 with: NB-7
500Hz, 1.8KHz, 2.3KHz, 6KHz filters
Aux board
MN-7 Speaker
RV-7 VFO
PS-7 Power Supply

Johnson HT-37 $135.00

National NC-303 with XCU-303 Deluxe calibrator $325.00

Oak Hills Research Classic QRP 20/40 $40.00

These items are pickup only in Fernley, NV

Contact me directly at: 775-815-5260

73
Ron, K7SSB
<ronskovly@...>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13183. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 02:29:30 UTC
From: Garey Barrell
Topic: 13108 Message: 13183

Doug -

OK. Looks good. We're getting down to things like coupling capacitors. Do you have, or have access to a scope? An RF probe would do. We need some way to check and compare signal strengths.

Pins 4 and 5 are the filament pins, so as long as one is 6.3 and one is ground, we're ok.

From what we've found so far, all stages seem to be working, just not enough gain. Try tuning on 80 or 20, and see if you notice any difference. Peak RF TUNE, PLATEand LOAD controls on each band while listening in the receiver and confirm thatthey all 'tune' or peak when varied.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> V4
>
> 1. 160 2.0
> 2. 0
> 3. NC
> 4. 6.35VAC
> 5. tied to ground
> 6. 0
> 7. 226 230
> 8. 161 148
>
> First number receive second number transmit
>
> The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.
>
> Regards,
>
> Doug N9XTF
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:

>> OK, DC levels look good. Check voltages on V4. This should eliminate
>> any DC problems.
>>
>> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> Driver tube V6 voltages as follows;
>>>
>>> 1. 157 2.8
>>> 2. 0
>>> 3. Not connected
>>> 4. 0
>>> 5. 0
>>> 6. 6.408 VAC
>>> 7. 252 236
>>> 8. 253 164
>>>
>>> First number receive second number transmit.
>>>
>>> Regards,
>>>
>>> Doug N9XTF
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>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> OK, that's good. So we have a signal, we just have to amplify it and
>>>> get it to the PA!
>>>>
>>>> Check the DC voltages on V6.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
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>>>>
>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>

>>>>> With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
>>>>>
>>>>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
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>>>>>
>>>>> Doug N9XTF
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> OK, I guess I missed that. Based on your measurements I calculate 96
>>>>>> mA so that's pretty close! :-)
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>>>>>> So. Refresh the problem.
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>>>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
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>>>>>> If you switch to -X, key the transmitter (or unplug the key) do you
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>>>>>> TUNE control do you get any increase in plate current? If you are on
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>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>>>> slowcountry1 wrote:
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>>>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
>>>>>>>
>>>>>>> Thanks,
>>>>>>>

>>>>>>> Doug N9XTF
>>>>>>>

13184. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 03:09:09 UTC
From: slowcountry1
Topic: 13108 Message: 13184

Garey,

I do not have either a probe or a working scope (couple of defunct military ones lol). I may be able to borrow one next week. I will check signals on other bands tomorrow. Any pointers on what capacitors may be at issue, I could check and or replace in the interim?

Thanks for all your help!!!

With all the help you dedicate to this list, when do you actually get time to operate your gear???

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> OK. Looks good. We're getting down to things like coupling
> capacitors. Do you have, or have access to a scope? An RF probe would
> do. We need some way to check and compare signal strengths.
>
> Pins 4 and 5 are the filament pins, so as long as one is 6.3 and one
> is ground, we're ok.
>
> From what we've found so far, all stages seem to be working, just not
> enough gain. Try tuning on 80 or 20, and see if you notice any
> difference. Peak RF TUNE, PLATEand LOAD controls on each band while
> listening in the receiver and confirm thatthey all 'tune' or peak when
> varied.
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > V4
> >
> > 1. 160 2.0
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> > 4. 6.35VAC
> > 5. tied to ground
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> > 7. 226 230
> > 8. 161 148
> >
> > First number receive second number transmit
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> > The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.
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> > Regards,
> >
> > Doug N9XTF
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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> >> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
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> >>> Driver tube V6 voltages as follows;
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> >>> 2. 0
> >>> 3. Not connected
> >>> 4. 0
> >>> 5. 0
> >>> 6. 6.408 VAC
> >>> 7. 252 236
> >>> 8. 253 164
> >>>
> >>> First number receive second number transmit.
> >>>
> >>> Regards,
> >>>
> >>> Doug N9XTF
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>

> >>>> OK, that's good. So we have a signal, we just have to amplify it and
> >>>> get it to the PA!
> >>>>
> >>>> Check the DC voltages on V6.
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> >>>> 73, Garey - K4OAH
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> >>>> slowcountry1 wrote:
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> >>>>>
> >>>>> Regards,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> Doug -
> >>>>>>
> >>>>>> OK, I guess I missed that. Based on your measurements I calculate 96
> >>>>>> mA so that's pretty close! :-)
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> >>>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
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> >>>>>> If you switch to -X, key the transmitter (or unplug the key) do you
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> >>>>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> >>>>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
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> >>>>>> slowcountry1 wrote:
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> >>>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
> >>>>>>>
> >>>>>>> Thanks,
> >>>>>>>
> >>>>>>> Doug N9XTF
> >>>>>>>
>

13185. Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 13:44:43 UTC
From: dickbolt@...
Topic: 13185 Message: 13185

I finally decided to part with my Drake FS-4 Synthesizer & soon the SPR4 that goes with it. It seems I did not put it on ebay correctly as its not in the Drake section of Ham Receivers!

http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_DefaultDomain_0&hash=item19db0f01c6
Dick

[Non-text portions of this message have been removed]

13186. Re: [DrakeRadio] Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 13:48:32 UTC
From: Eddy Swynar
Topic: 13185 Message: 13186

And to think that I could have purchased one of these rare birds locally one year ago, for the princely sum of---are you sitting down...?---$75.00!

Yes, I was an absolute IDIOT not to have grabbed it!

~73~ de Eddy VE3CUI - VE3XZ

On 2013-04-14, at 9:44 AM, dickbolt@... wrote:

> I finally decided to part with my Drake FS-4 Synthesizer & soon the SPR4 that goes with it. It seems I did not put it on ebay correctly as its not in the Drake section of Ham Receivers!
>
> http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_DefaultDomain_0&hash=item19db0f01c6
> Dick
>
>
>

[Non-text portions of this message have been removed]

13187. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 13:55:35 UTC
From: Garey Barrell
Topic: 13108 Message: 13187

Doug -

What we needto dois check that signal from V4, should be about 6V p-p on the Plate. The coupling capacitors are C41 and C61, but I wouldn't recommend replacing them until we can look at the signal levels. No point in injecting another variable into the system. We should get about 150V p-p on the Plate of V6.

Have you gonethrough the alignment procedure for T7 throughT10, using the separate receiver, to ensure that they DO resonate (tune for a peak) where they should? Try on more than one band.

Also, I don't recall if you have done the 'tighten all the ground' hardware process. Go through and put a screwdriver on every screw that makes a ground connection, tube sockets, terminal strips, shields, etc. If tight, loosen a quarter turn and then tighten again.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> I do not have either a probe or a working scope (couple of defunct military ones lol). I may be able to borrow one next week. I will check signals on other bands tomorrow. Any pointers on what capacitors may be at issue, I could check and or replace in the interim?
>
> Thanks for all your help!!!
>
> With all the help you dedicate to this list, when do you actually get time to operate your gear???
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> OK. Looks good. We're getting down to things like coupling
>> capacitors. Do you have, or have access to a scope? An RF probe would
>> do. We need some way to check and compare signal strengths.
>>
>> Pins 4 and 5 are the filament pins, so as long as one is 6.3 and one

>> is ground, we're ok.
>>
>> From what we've found so far, all stages seem to be working, just not
>> enough gain. Try tuning on 80 or 20, and see if you notice any
>> difference. Peak RF TUNE, PLATEand LOAD controls on each band while
>> listening in the receiver and confirm thatthey all 'tune' or peak when
>> varied.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> V4
>>>
>>> 1. 160 2.0
>>> 2. 0
>>> 3. NC
>>> 4. 6.35VAC
>>> 5. tied to ground
>>> 6. 0
>>> 7. 226 230
>>> 8. 161 148
>>>
>>> First number receive second number transmit
>>>
>>> The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.
>>>
>>> Regards,
>>>
>>> Doug N9XTF
>>>
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> OK, DC levels look good. Check voltages on V4. This should eliminate
>>>> any DC problems.
>>>>
>>>> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>

>>>>
>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>
>>>>> Driver tube V6 voltages as follows;
>>>>>
>>>>> 1. 157 2.8
>>>>> 2. 0
>>>>> 3. Not connected
>>>>> 4. 0
>>>>> 5. 0
>>>>> 6. 6.408 VAC
>>>>> 7. 252 236
>>>>> 8. 253 164
>>>>>
>>>>> First number receive second number transmit.
>>>>>
>>>>> Regards,
>>>>>
>>>>> Doug N9XTF
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> OK, that's good. So we have a signal, we just have to amplify it and
>>>>>> get it to the PA!
>>>>>>
>>>>>> Check the DC voltages on V6.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> slowcountry1 wrote:
>>>>>>> Garey,
>>>>>>>
>>>>>>> With the switch in CW-Tune and the sideband switch in the non-X position, I can
adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X
together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf
tune and there is no change is plate current and no output on the external wattmeter.
>>>>>>>
>>>>>>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band
switch. If I set the sideband to the non x position and the other switch to X-CW I hear a
strong tone on the 847. If I also switch the sideband switch to X, the signal strength on
the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the
847.
>>>>>>>

>>>>>>> Regards,
>>>>>>>
>>>>>>> Doug N9XTF
>>>>>>>
>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>> Doug -
>>>>>>>>
>>>>>>>> OK, I guess I missed that. Based on your measurements I calculate 96
>>>>>>>> mA so that's pretty close! :-)
>>>>>>>>
>>>>>>>> So. Refresh the problem.
>>>>>>>>
>>>>>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
>>>>>>>> BIAS correctly.
>>>>>>>>
>>>>>>>> If you switch to -X, key the transmitter (or unplug the key) do you
>>>>>>>> see the idle current? If you increase the XMTR GAIN and peak the RF
>>>>>>>> TUNE control do you get any increase in plate current? If you are on
>>>>>>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
>>>>>>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
>>>>>>>> for maximum signal onthe receiver.
>>>>>>>>
>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>> <www.k4oah.com>
>>>>>>>>
>>>>>>>> slowcountry1 wrote:
>>>>>>>>> Garey,
>>>>>>>>>
>>>>>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
>>>>>>>>>
>>>>>>>>> Thanks,
>>>>>>>>>
>>>>>>>>> Doug N9XTF
>>>>>>>>>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

>

13188. Re: [DrakeRadio] Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 14:16:00 UTC
From: vacuuminded2@...
Topic: 13185 Message: 13188

I second that emotion.

Sent from my outdated iPhone wireless thingy

On Apr 14, 2013, at 8:48 AM, Eddy Swynar <deswynar@...> wrote:

> And to think that I could have purchased one of these rare birds locally one year ago, for the princely sum of---are you sitting down...?---$75.00!
>
> Yes, I was an absolute IDIOT not to have grabbed it!
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
> On 2013-04-14, at 9:44 AM, dickbolt@... wrote:
>
> > I finally decided to part with my Drake FS-4 Synthesizer & soon the SPR4 that goes with it. It seems I did not put it on ebay correctly as its not in the Drake section of Ham Receivers!
> >
> > http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_DefaultDomain_0&hash=item19db0f01c6
> > Dick
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

13189. Re: [DrakeRadio] Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 15:01:27 UTC
From: Chgypsy@...
Topic: 13185 Message: 13189

I resemble that remark also. Carl

deswynar@... writes:

Yes, I was an absolute IDIOT not to have grabbed it!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

13190. Re: L7 Linear fan, Drake Forum at Hamvention, etc.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 15:44:59 UTC
From: k9sqg
Topic: 13161 Message: 13190

Fellow Drake Enthusiasts,

Yes, the fan replacement for the L7 linear has indeed been a saga for me, hi hi. Not so much the actual process of replacing the fan but rather determining that the fan itself was defective. After replacing a defective fan with a new one, improved version with ball bearings rather than sleeve bearings, there were subsequent failures with it and additional fans. After replacing the fan(s), thermostat, dropping resistor, and even the wiring I eventually determined that it was the new fans that were also "defective". How could this be?

Based upon phone conversations with several distributors as well as factory representatives, I formed several conclusions. First, the company had changed hands more than once. As a result, model numbers, specifications, and components themselves underwent several changes. Second, the TA-450, TA-450S, etc. became more of series numbers rather than actual product numbers. So the former model number and voltage rating were no longer a way to identify the specific fan that was needed. One needed to know the specific model number (e.g. A7388--, etc.) when getting a replacement. Third, because of changes in manufacturing processes, the lubricant used for the bearings changed, intentionally or accidently, not sure which. In some applications this would go unnoticed but when exhausting hot air from a linear, the lubricant would flow and fail to lubricate properly thus resulting in the fan slowing and eventually stopping. Letting the fan cool would enable normal operation.

Bottom line, proceed with caution and be aware of possible problems resulting in fan failure. As a result, I have located some fans that have worked successfully for me in this high temperature application. Issues of concern are CFM rating of the fan, noise level, and impedance (if not close to original fan, changing the value of the series dropping resistor might be warranted).

I went through a similar process with selecting external fans for the L4, L4B, and L7 power supplies. More recently, I devised a way of adding an internal fan to the respective power supplies.

All of the above were discussed in detail during the Drake Forums at Hamvention. Videos are available at the VIMEO website.

Enjoy those Drakes! And yes, there will be a Drake Forum at Hamvention 2013. There will be handouts of collectable pens with the Drake logo for the first 100 attendees, hundreds of dollars of free door prizes, and some interesting presentations. You are invited to attend the Drake Forum on Saturday of Hamvention weekend, 10:30 to 11:30, in Room 2, same as last year. Typically the room is packed with standing room only so please consider arriving early. Safe travel my friends.

73,

Evan, K9SQG

--- In DrakeRadio@yahoogroups.com, "Max Cotton" <AirRadio@...> wrote:
>
> This afternoon my L-7 has decided to get really noisy in the fan department, without looking into this is there a drop in quiet replacement available?
> 73 Max
> M0GHQ
>
> [Non-text portions of this message have been removed]
>

13191. Quigs - alternate

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 15:57:06 UTC
From: greenmoldydonuts
Topic: 13191 Message: 13191

A bit ago the subject of quigs came up, I found it fascinating, usefull, and found them to be extremely rare. While browsing through a large sporting goods store, I found something called "Wire Leader Connector Sleeves" made by Berkley. They only had the #3 size available, but for $2.49 a pack of 33 I just had to try them. The diameter is too small to overlay the two wires inside, but at 3/8 inch long, one can shove one wire in half way, pinch with a needle nose to hold it, shove another wire in half way from the other side, pinch with a needle nose, and solder both ends. The sleeve does not appear to be stainless steel or nickle plated and will readily take solder. A suitable substitute for the traditional spring-type quigs.
The funniest part was when I went to check out, the well-trained in "up-selling" clerk asked if I needed leaders or leader material for these. I replied, "No, I'm using them in a ham radio!" I guess I never dreamed I looked like I was from outer space!!

Bernie in ND

13192. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 16:24:40 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 13192

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

13193. Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 16:36:08 UTC
From: <va3ag@...>
Topic: 2620 Message: 13193

Hello all:

Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated.

73

Aldo VA3AG

[Non-text portions of this message have been removed]

13194. Re: [DrakeRadio] Re: L7 Linear fan, Drake Forum at Hamvention, etc.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 16:44:15 UTC
From: Max Cotton
Topic: 13161 Message: 13194

Evan,
I read this with interest, does the fan have tags or is it wired, I ask this as it is very difficult to remove the linear from where it is placed at the moment and although I can probably get a replacement fairly quickly I really do not wish to dismantle half the shack to get to it. I have looked at several options from RS and Farnell, ball bearing versions around 100cfm with 48dBA noise level and 220mA current rating apart from the high current the other specs are close to the original. I did find a link to the TA450S fan which says it is ball bearing http://www.network-server-parts.com/ta450s-nidec-torin-alpha-v-ball-bearing-fan-p4503039010.html this leaves me a bit puzzled as you say the original is sleeve bearing?

73 Max
M0GHQ

[Non-text portions of this message have been removed]

13195. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 17:29:22 UTC
From: Al Parker
Topic: 2620 Message: 13195

Hi Aldo,
I think all the R-4/T-4/TR-3,4 series cabinet paint is the same. I've used Rustoleum Satin Black, no. V-7777 on many of them with excellent results. It's possible they've changed the no. recently, it's been abt 2 yrs since I've bought any, and they seem to have expanded their offerings a-la Martha Stewart, e.g. Chocolate Jamoca Fudge, etc.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 4/14/2013 12:36 PM, va3ag@... wrote:
> Hello all:
>
> Where can i get the black paint that is similar to what Drake used on
> the TR-4C? any help would be appreciated.
>
> 73
>
> Aldo VA3AG
>
> [Non-text portions of this message have been removed]
>
>

13196. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 17:30:29 UTC
From: Chgypsy@...
Topic: 2620 Message: 13196

Aldo, check the archives for Jan maybe Feb 2013 all that came up once again at that point. Carl wd8nhk

va3ag@... writes:

Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated. Aldo VA3AG

[Non-text portions of this message have been removed]

13197. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 18:28:26 UTC
From: Trevor Liburd
Topic: 13086 Message: 13197

Hi guys,

The rig works ok in RX, I lost the PA finals, I don't see these the SRF-2337 in RF parts listing, the ones in this PA are moto product but part number on the transistors are A-4017, any idea, someone mod the PA with a sub? I see they mod the PTO and Meter lamps and wire them in series and used two 6.3v lamps,

what are you guys using to replaced the finals in the PA?

v44kai.....Joel.

On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...> wrote:

> Ok good Garey, I should have a few 4007 somewhere, will look later tonight
> when I returned home, remember Garey I can't nowhere on the island to
> purchase electronic component,
>
> Thanks,
>
> v44kai.....Joel
>
>
> On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...>wrote:
>
>> **
>>
>>
>> You won't know until you check sensitivity, but certainly good enough
>> to keep troubleshooting!
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Trevor Liburd wrote:
>> > Hi guys,
>> >
>> > Found some 1N-4937 that I use to use in my TV and VCR repairs, a long
>> time
>> > ago, they are Schottky rectifier fast speed switching, that worked so
>> far,

>> > and the receiver is back to life,
>> >
>> > I will run the rx a while before I connect back the components in the PA
>> > unit to make sure that the PA works, will keep you'll updated,
>> >
>> > v44kai.....Joel.
>> >
>> >
>> > On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...>
>> wrote:
>> >
>> >> **
>>
>> >>
>> >>
>> >> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
>> >> the signal path right at the front end, so a common diode may be
>> >> problematic.
>> >>
>> >>
>> >> 73, Garey - K4OAH
>> >> Glen Allen, VA
>> >>
>> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> >> and TR-4/C Service Supplement CDs
>> >> <www.k4oah.com>
>> >>
>> >>
>>
>>
>>
>
>
>
> --
> v44kai.....Joel.
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13198. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:24:31 UTC
From: Garey Barrell
Topic: 13086 Message: 13198

Joel -

I have used 2SC1969's for Drivers ($32 for matched pair)

PA is 2SC2879(A) ($35 each)

RF Parts <www.rfparts.com> stocks them.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Hi guys,
>
> The rig works ok in RX, I lost the PA finals, I don't see these the
> SRF-2337 in RF parts listing, the ones in this PA are moto product but
> part number on the transistors are A-4017, any idea, someone mod the PA
> with a sub? I see they mod the PTO and Meter lamps and wire them in series
> and used two 6.3v lamps,
>
> what are you guys using to replaced the finals in the PA?
>
> v44kai.....Joel.
>
>
>
> On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...> wrote:
>
>> Ok good Garey, I should have a few 4007 somewhere, will look later tonight
>> when I returned home, remember Garey I can't nowhere on the island to
>> purchase electronic component,
>>
>> Thanks,
>>
>> v44kai.....Joel
>>
>>
>> On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...>wrote:
>>
>>> **
>>>
>>>

>>> You won't know until you check sensitivity, but certainly good enough
>>> to keep troubleshooting!
>>>
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> Trevor Liburd wrote:
>>>> Hi guys,
>>>>
>>>> Found some 1N-4937 that I use to use in my TV and VCR repairs, a long
>>> time
>>>> ago, they are Schottky rectifier fast speed switching, that worked so
>>> far,
>>>> and the receiver is back to life,
>>>>
>>>> I will run the rx a while before I connect back the components in the PA
>>>> unit to make sure that the PA works, will keep you'll updated,
>>>>
>>>> v44kai.....Joel.
>>>>
>>>>
>>>> On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...>
>>> wrote:
>>>>> **
>>>>>
>>>>> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
>>>>> the signal path right at the front end, so a common diode may be
>>>>> problematic.
>>>>>
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>>
>>>
>>>
>>
>>
>> --
>> v44kai.....Joel.
>>

>
>

13199. Re: [DrakeRadio] Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:27:51 UTC
From: Charles Ring
Topic: 13185 Message: 13199

The SPR-4 might be different, but I'd like to know the result of putting an FS-4 on 5.0 MHz to cover 60 meters (receive only), on a R-4x. Is it locked out on the FS-4? Does it work? That should tell me what to expect if I get a crystal to cover 5.0 to 5.5 MHz on my R-4C. I know to not try to transmit there with the 4 line.

73 de W3NU

On 4/14/2013 0944, dickbolt@... wrote:
>
> I finally decided to part with my Drake FS-4 Synthesizer & soon the
> SPR4 that goes with it. It seems I did not put it on ebay correctly as
> its not in the Drake section of Ham Receivers!
>
> http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_DefaultDomain_0&hash=item19db0f01c6
> Dick
>

[Non-text portions of this message have been removed]

13200. Re: [DrakeRadio] Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:30:40 UTC
From: Garey Barrell
Topic: 13185 Message: 13200

Either way will 'work', but there will be LOTS of spurious signals.
Definitely 'Receive ONLY'.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Charles Ring wrote:
> The SPR-4 might be different, but I'd like to know the result of putting
> an FS-4 on 5.0 MHz to cover 60 meters (receive only), on a R-4x. Is it
> locked out on the FS-4? Does it work? That should tell me what to expect
> if I get a crystal to cover 5.0 to 5.5 MHz on my R-4C. I know to not try
> to transmit there with the 4 line.
>
> 73 de W3NU
>
>
>
> On 4/14/2013 0944, dickbolt@... wrote:
>> I finally decided to part with my Drake FS-4 Synthesizer & soon the
>> SPR4 that goes with it. It seems I did not put it on ebay correctly as
>> its not in the Drake section of Ham Receivers!
>>
>> http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_Defa
ultDomain_0&hash=item19db0f01c6
>> Dick
>>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13201. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:33:07 UTC
From: Trevor Liburd
Topic: 13086 Message: 13201

Ok Garey,

The 2879 I think used in the ts 430/440 I should have a couple, will look
in my stock, is the Bias the same for the 2879?

Thanks,

v44kai.....Joel,

On Sun, Apr 14, 2013 at 3:24 PM, Garey Barrell <k4oah@mindspring.com> wrote:

> **
>
>
> Joel -
>
> I have used 2SC1969's for Drivers ($32 for matched pair)
>
> PA is 2SC2879(A) ($35 each)
>
> RF Parts <www.rfparts.com> stocks them.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Trevor Liburd wrote:
> > Hi guys,
> >
> > The rig works ok in RX, I lost the PA finals, I don't see these the
> > SRF-2337 in RF parts listing, the ones in this PA are moto product but
> > part number on the transistors are A-4017, any idea, someone mod the PA
> > with a sub? I see they mod the PTO and Meter lamps and wire them in
> series
> > and used two 6.3v lamps,
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> > what are you guys using to replaced the finals in the PA?
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> > v44kai.....Joel.
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> > On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...> wrote:
> >
> >> Ok good Garey, I should have a few 4007 somewhere, will look later
> tonight
> >> when I returned home, remember Garey I can't nowhere on the island to
> >> purchase electronic component,
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> >> Thanks,
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> >> On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...
> >>wrote:
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> >>> **
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> >>> You won't know until you check sensitivity, but certainly good enough
> >>> to keep troubleshooting!
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> >>> 73, Garey - K4OAH
> >>> Glen Allen, VA
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> >>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>> Trevor Liburd wrote:
> >>>> Hi guys,
> >>>>
> >>>> Found some 1N-4937 that I use to use in my TV and VCR repairs, a long
> >>> time
> >>>> ago, they are Schottky rectifier fast speed switching, that worked so
> >>> far,
> >>>> and the receiver is back to life,
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> >>>> I will run the rx a while before I connect back the components in the
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> >>>> On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <k4oah@...>
> >>> wrote:
> >>>>> **
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> >>>>> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
> >>>>> the signal path right at the front end, so a common diode may be
> >>>>> problematic.
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> >>>>> 73, Garey - K4OAH
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>

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v44kai.....Joel.

[Non-text portions of this message have been removed]

13202. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:36:08 UTC
From: amfone
Topic: 2620 Message: 13202

I just painted a Drake 2B, same color as the later Drakes and used
Krylon Satin Black number 51613 came out good.

Good Luck
73 Tim
WB8UHZ

_____
From: "Chgypsy@..." <Chgypsy@aol.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, April 14, 2013 1:30 PM
Subject: Re: [DrakeRadio] Drake paint

Aldo, check the archives for Jan maybe Feb 2013 all that came up once
again at that point. Carl wd8nhk

va3ag@... writes:

Where can i get the black paint that is similar to what Drake used on the
TR-4C? any help would be appreciated. Aldo VA3AG

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13203. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:39:24 UTC
From: <va3ag@...>
Topic: 2620 Message: 13203

Thanks for the help!

From: Chgypsy@...
Sent: Sunday, April 14, 2013 1:30 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake paint

Aldo, check the archives for Jan maybe Feb 2013 all that came up once again at that point. Carl wd8nhk

mailto:va3ag%40sympatico.ca writes:

Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated. Aldo VA3AG

[Non-text portions of this message have been removed]

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13204. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:44:23 UTC
From: amfone
Topic: 2620 Message: 13204

I just repainted a Drake 2B, same color as the TR4C which I have.I used Krylon Satin Black Number 51613 came out very nice.

Good luck.
73 Tim
WB8UHZ

_____
From: "va3ag@sympatico.ca" <va3ag@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, April 14, 2013 3:39 PM
Subject: Re: [DrakeRadio] Drake paint

Thanks for the help!

From: Chgypsy@...
Sent: Sunday, April 14, 2013 1:30 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake paint

Aldo, check the archives for Jan maybe Feb 2013 all that came up once again at that point. Carl wd8nhk

mailto:va3ag%40sympatico.ca writes:

Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated. Aldo VA3AG

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13205. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:45:07 UTC
From: Garey Barrell
Topic: 13086 Message: 13205

I don't remember, seems like it was in the 300 - 350 ma range. Floyd,
K8AC had an article on WB4HFN's site describing fixing up a PA. I
believe he used those devices, you might want to look up that article.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Trevor Liburd wrote:
> Ok Garey,
>
> The 2879 I think used in the ts 430/440 I should have a couple, will look
> in my stock, is the Bias the same for the 2879?
>
> Thanks,
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> v44kai.....Joel,
>
>
> On Sun, Apr 14, 2013 at 3:24 PM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Joel -
>>
>> I have used 2SC1969's for Drivers ($32 for matched pair)
>>
>> PA is 2SC2879(A) ($35 each)
>>
>> RF Parts <www.rfparts.com> stocks them.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> Trevor Liburd wrote:
>>> Hi guys,
>>>

>>> The rig works ok in RX, I lost the PA finals, I don't see these the
>>> SRF-2337 in RF parts listing, the ones in this PA are moto product but
>>> part number on the transistors are A-4017, any idea, someone mod the PA
>>> with a sub? I see they mod the PTO and Meter lamps and wire them in
>> series
>>> and used two 6.3v lamps,
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>>> what are you guys using to replaced the finals in the PA?
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>>> v44kai.....Joel.
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>>> On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...> wrote:
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>>>> Ok good Garey, I should have a few 4007 somewhere, will look later
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>>>> On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...
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>>>>>> and the receiver is back to life,
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>>>>>> I will run the rx a while before I connect back the components in the

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>>>>>> unit to make sure that the PA works, will keep you'll updated,
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>>>>> wrote:
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>>>>>>> The 1N4007 is a better sub, as it IS a PIN structure diode. It is in
>>>>>>> the signal path right at the front end, so a common diode may be
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>>>> v44kai.....Joel.
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13206. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 19:42:30 UTC
From: <va3ag@...>
Topic: 2620 Message: 13206

Thanks Tim for the info I will use the same for my TR-4C. How did you do the spackled part?

73

Aldo VA3AG

From: amfone
Sent: Sunday, April 14, 2013 3:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake paint

I just painted a Drake 2B, same color as the later Drakes and used
Krylon Satin Black number 51613 came out good.

Good Luck
73 Tim
WB8UHZ

From: "mailto:Chgypsy%40aol.com" <mailto:Chgypsy%40aol.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Sunday, April 14, 2013 1:30 PM
Subject: Re: [DrakeRadio] Drake paint

Aldo, check the archives for Jan maybe Feb 2013 all that came up once
again at that point. Carl wd8nhk

mailto:va3ag%40sympatico.ca writes:

Where can i get the black paint that is similar to what Drake used on the
TR-4C? any help would be appreciated. Aldo VA3AG

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13207. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 20:00:05 UTC
From: amfone
Topic: 2620 Message: 13207

Well I can tell you all that I did Aldo.

I put the cabinet only in the dishwasher, washed it. Of course all the dirt and some paint came off and there was peeling paint on the cabinet. I found at the local hardware some very fine sandpaper and sanded the cabinet where the paint had peeled and once finished cleaned the cabinet again to get all the paint dust from sanding off and then proceeded to put a light coat of paint on. I had to apply about three coats, just a little at a time, let it dry and then apply again. There is no spackled part if you mean the little impressions on the case, I could not see how to do that maybe someone else can help.

73 Tim

From: "va3ag@..." <va3ag@sympatico.ca>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, April 14, 2013 3:42 PM
Subject: Re: [DrakeRadio] Drake paint

Thanks Tim for the info I will use the same for my TR-4C. How did you do the spackled part?

73

Aldo VA3AG

From: amfone
Sent: Sunday, April 14, 2013 3:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake paint

I just painted a Drake 2B, same color as the later Drakes and used
Krylon Satin Black number 51613 came out good.

Good Luck
73 Tim
WB8UHZ

From: "mailto:Chgypsy%40aol.com" <mailto:Chgypsy%40aol.com>
To: mailto:DrakeRadio%40yahoogroups.com
Sent: Sunday, April 14, 2013 1:30 PM
Subject: Re: [DrakeRadio] Drake paint

Aldo, check the archives for Jan maybe Feb 2013 all that came up once
again at that point. Carl wd8nhk

mailto:va3ag%40sympatico.ca writes:

Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated. Aldo VA3AG

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13208. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 20:38:31 UTC
From: matt.newman10
Topic: 2620 Message: 13208

Aldo,

I have been using Tremclad Semi-Gloss on my TR-4, Drake twins, and one PS enclosure with excellents results. Hard and resiliant. Holds up over time. Looks great. I wash the encloures in hot soapy water and rinse thoroughly. Pat dry with paper towels, blow dry with a hair dryer and let stand. Be sure the area inside the folds are thoroughly dry. Before I wash, I remove any rust in the scratches or elsewhere with a fine abrasive.

Follow the Tremclad instuctions - for example, apply second coat within one hour, then only after 48 hours. This is important. Hope this might help. Good luck with your TR-4C.

73, Matt - VA3MGN

--- In DrakeRadio@yahoogroups.com, <va3ag@...> wrote:
>
> Hello all:
>
> Where can i get the black paint that is similar to what Drake used on the TR-4C? any help would be appreciated.
>
> 73
>
> Aldo VA3AG
>
> [Non-text portions of this message have been removed]
>

13209. RE: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 21:24:35 UTC
From: Rich Arland
Topic: 2620 Message: 13209

Matt:

Is there any number associated with the Tremclad Semi-Gloss paint??

I have a 2B, two TR-4s and an RV-4 to repaint!!

Vy 73

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

Aldo,

I have been using Tremclad Semi-Gloss on my TR-4, Drake twins, and one PS enclosure with excellents results. Hard and resiliant. Holds up over time. Looks great. I wash the encloures in hot soapy water and rinse thoroughly. Pat dry with paper towels, blow dry with a hair dryer and let stand. Be sure the area inside the folds are thoroughly dry. Before I wash, I remove any rust in the scratches or elsewhere with a fine abrasive.

Follow the Tremclad instuctions - for example, apply second coat within one hour, then only after 48 hours. This is important. Hope this might help. Good luck with your TR-4C.

vy7273, Matt - VA3MGN

[Non-text portions of this message have been removed]

13210. Re: L7 Linear fan, Drake Forum at Hamvention, etc.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 21:42:52 UTC
From: k9sqg
Topic: 13161 Message: 13210

Max,

The original fan has terminals, as if a connector could be used, BUT the wires in the L7 are tack soldered to those terminals.

Replacing the fan is tricky. Why? One has to be very, very careful when dealing with high vacuum tubes like the 3-500Z. Safety glasses should ALWAYS be worn when working around those tubes. The tubes should be removed when replacing the fan.

The fan housing and wires are not difficult to remove. However. you might have to make arrangements to support the fan while removing or adding the wires. Small boxes, books, or "painter's tape" can be used for this purpose. Also, during re-assembly, each bolt and nut should be loosely attached until all are inserted, then they can be tightened.

As to what is a ball bearing versus a sleeve bearing fan, I have difficulty answering that question. I have just been going with what a factory rep told me. I don't know if it was accurate or might have changed from the various production runs. In fact, I have not found conclusive documentation that specifically defines how the TA-450 differs from the TA-450S. I wish I could clarify the matter but have been unable to do so.

73,

Evan, K9SQG

--- In DrakeRadio@yahoogroups.com, "Max Cotton" <AirRadio@...> wrote:
>
> Evan,
> I read this with interest, does the fan have tags or is it wired, I ask this as it is very difficult to remove the linear from where it is placed at the moment and although I can probably get a replacement fairly quickly I really do not wish to dismantle half the shack to get to it. I have looked at several options from RS and Farnell, ball bearing versions around 100cfm with 48dBA noise level and 220mA current rating apart from the high current the other specs are close to the original. I did find a link to the TA450S fan which says it is ball bearing http://www.network-server-parts.com/ta450s-nidec-torin-alpha-v-ball-bearing-fan-p4503039010.html this leaves me a bit puzzled as you say the original is sleeve bearing?
>
> 73 Max
> M0GHQ
>
>
> [Non-text portions of this message have been removed]
>

13211. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 22:20:06 UTC
From: Jim Shorney
Topic: 13086 Message: 13211

This is the article of which Garey speaks:

http://www.wb4hfn.com/DRAKE/DrakeArticles/TR7_Amp_Repair/TR7-Amp.htm

I did this work to my PA deck a few years ago, with good results. However, I believe the higher gain of the new devices brought out the instability that causes the PA in some TR-7s to oscillate in the 40-Meter band segment when the power output is set to spec. There are two fixes to this: set the maximum power to a lower level via the ALC adjustment in the bottom of the radio, or install a PIN diode attenuator to level the gain across the bands. I've spent hours experimenting with negative feedback levels in the PA deck, and have not come up with a reliable solution that way, nor have I found a way to break the feedback path elsewhere. Bob Loving designed a stripped-down version of the PIN attenuator board that lowers the system gain on the low bands only, I'm going to try that the next time I have my rig on the bench.

73

-Jim
NU0C

On Sun, 14 Apr 2013 15:45:07 -0400, Garey Barrell wrote:

>I don't remember, seems like it was in the 300 - 350 ma range. Floyd,
>K8AC had an article on WB4HFN's site describing fixing up a PA. I
>believe he used those devices, you might want to look up that article.
>
>73, Garey - K4OAH
>Glen Allen, VA
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>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>Trevor Liburd wrote:
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>> in my stock, is the Bias the same for the 2879?
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>> Thanks,
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>> v44kai.....Joel,
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>> On Sun, Apr 14, 2013 at 3:24 PM, Garey Barrell <k4oah@...> wrote:

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>>> PA is 2SC2879(A) ($35 each)
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>>> 73, Garey - K4OAH
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>>>> SRF-2337 in RF parts listing, the ones in this PA are moto product but
>>>> part number on the transistors are A-4017, any idea, someone mod the PA
>>>> with a sub? I see they mod the PTO and Meter lamps and wire them in
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>>>> and used two 6.3v lamps,
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>>>> v44kai.....Joel.
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>>>> On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...> wrote:
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The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13212. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 23:10:43 UTC
From: slowcountry1
Topic: 13108 Message: 13212

Garey,

Here are today's events; this may or may not reveal any useful information, but here it is;

I went through and bear nut tightened every nut and screw that I could find. I backed them off first before tightening. I went though the alignment for T-7 through T-10. I noticed that peaking T-9 20 meter part did not hold. Following this, I attempted to tune up the rig on 80 meters. The plate meter pegged with the XMTR gain fully counter clockwise, I had to advance the XMTR gain to get the plate current to come down; I was then able to tune 200watts. I experienced the same plate pegging on 40M and 20M but was able to settle it down and achieve 200watts. I figured it was some type of oscillation as I had the PA cage off the rig and had not yet adjusted the tube neutralization. After I reinstalled the cage, I am no longer able to draw any plate current, above resting current, or derive any output power on my watt meter.

I went back and checked the T-7 through T-10 alignment and found that 20M was down again, I attempted to re-peak it however T9 had no effect and noticed the top adjustment screw felt funny. I flipped the rig over and noticed that someone had been here before. There was new solder and someone had done a very poor solder job. I do not know how I missed this previously as I had checked it over pretty well; at least I thought I did. I don't know if they replaced T-9 or if they replaced a cap or what, but there definitely had been some work done.

I removed T-9 and pulled the can off the assembly and found that the ferrite material was busted up inside the adjustment tube. I then replaced the unit with one out of a parts rig. I re-did the alignment and now T-9 top has to be screwed all the way in to show an increase in S-Meter reading; where it did not have to before. The other oddity is that the other "cans" when you tune past the sweet spot, the S-meter drops off; where T-9 will not do this. I can not peak the s-meter on 20M anywhere near the s-meter level as when I started.

I attempted to tune up again on 80M with the PA cover off and I am back to the starting point, I cannot develop any plate current above resting current and cannot derive any output power.

Here is an interesting tidbit that may or may not be useful. I accidently switched to my 10M antenna just before breaking for dinner. I attempted to tune up one last time on 80M and all of the sudden the plate current went from resting to .15 or .2 and the wattmeter indicated 50 watts or so output. Adjusting the plate and load capacitors would not produce any additional power but it acted like it was tuning. This is when I noticed that the wrong antenna was selected.

One last question in the puzzle, on the underneath side of the rig, there is a small tuning coil, I believe its L7; this is on the wafer next to T-9 underside. The pictures show it as a tuning slug however it is just a coil of wire with no slug in the center. The coil is split in about the middle with a small kink in it. There is a similar coil on the next wafer closer to the front of the rig that is not split, so I attempted to straighten L7 up as much as possible. How is this coil supposed to be?

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> What we needto dois check that signal from V4, should be about 6V p-p
> on the Plate. The coupling capacitors are C41 and C61, but I wouldn't
> recommend replacing them until we can look at the signal levels. No
> point in injecting another variable into the system. We should get
> about 150V p-p on the Plate of V6.
>
> Have you gonethrough the alignment procedure for T7 throughT10, using
> the separate receiver, to ensure that they DO resonate (tune for a
> peak) where they should? Try on more than one band.
>
> Also, I don't recall if you have done the 'tighten all the ground'
> hardware process. Go through and put a screwdriver on every screw that
> makes a ground connection, tube sockets, terminal strips, shields,
> etc. If tight, loosen a quarter turn and then tighten again.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > I do not have either a probe or a working scope (couple of defunct military ones lol).
I may be able to borrow one next week. I will check signals on other bands tomorrow. Any
pointers on what capacitors may be at issue, I could check and or replace in the interim?
> >
> > Thanks for all your help!!!
> >
> > With all the help you dedicate to this list, when do you actually get time to operate
your gear???
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> OK. Looks good. We're getting down to things like coupling
> >> capacitors. Do you have, or have access to a scope? An RF probe would
> >> do. We need some way to check and compare signal strengths.
> >>
> >> Pins 4 and 5 are the filament pins, so as long as one is 6.3 and one

> >> is ground, we're ok.
> >>
> >> From what we've found so far, all stages seem to be working, just not
> >> enough gain. Try tuning on 80 or 20, and see if you notice any
> >> difference. Peak RF TUNE, PLATEand LOAD controls on each band while
> >> listening in the receiver and confirm thatthey all 'tune' or peak when
> >> varied.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> V4
> >>>
> >>> 1. 160 2.0
> >>> 2. 0
> >>> 3. NC
> >>> 4. 6.35VAC
> >>> 5. tied to ground
> >>> 6. 0
> >>> 7. 226 230
> >>> 8. 161 148
> >>>
> >>> First number receive second number transmit
> >>>
> >>> The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.
> >>>
> >>> Regards,
> >>>
> >>> Doug N9XTF
> >>>
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> OK, DC levels look good. Check voltages on V4. This should eliminate
> >>>> any DC problems.
> >>>>
> >>>> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>

> >>>>
> >>>> slowcountry1 wrote:
> >>>>> Garey,
> >>>>>
> >>>>> Driver tube V6 voltages as follows;
> >>>>>
> >>>>> 1. 157 2.8
> >>>>> 2. 0
> >>>>> 3. Not connected
> >>>>> 4. 0
> >>>>> 5. 0
> >>>>> 6. 6.408 VAC
> >>>>> 7. 252 236
> >>>>> 8. 253 164
> >>>>>
> >>>>> First number receive second number transmit.
> >>>>>
> >>>>> Regards,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> Doug -
> >>>>>>
> >>>>>> OK, that's good. So we have a signal, we just have to amplify it and
> >>>>>> get it to the PA!
> >>>>>>
> >>>>>> Check the DC voltages on V6.
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>> <www.k4oah.com>
> >>>>>>
> >>>>>> slowcountry1 wrote:
> >>>>>>> Garey,
> >>>>>>>
> >>>>>>> With the switch in CW-Tune and the sideband switch in the non-X position, I can
adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X
together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf
tune and there is no change is plate current and no output on the external wattmeter.
> >>>>>>>
> >>>>>>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter
band switch. If I set the sideband to the non x position and the other switch to X-CW I
hear a strong tone on the 847. If I also switch the sideband switch to X, the signal
strength on the 847 increases. Peaking the rf tune in either mode produces a stronger
signal on the 847.
> >>>>>>>

> >>>>>>> Regards,
> >>>>>>>
> >>>>>>> Doug N9XTF
> >>>>>>>
> >>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>> Doug -
> >>>>>>>>
> >>>>>>>> OK, I guess I missed that. Based on your measurements I calculate 96
> >>>>>>>> mA so that's pretty close! :-)
> >>>>>>>>
> >>>>>>>> So. Refresh the problem.
> >>>>>>>>
> >>>>>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
> >>>>>>>> BIAS correctly.
> >>>>>>>>
> >>>>>>>> If you switch to -X, key the transmitter (or unplug the key) do you
> >>>>>>>> see the idle current? If you increase the XMTR GAIN and peak the RF
> >>>>>>>> TUNE control do you get any increase in plate current? If you are on
> >>>>>>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> >>>>>>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
> >>>>>>>> for maximum signal onthe receiver.
> >>>>>>>>
> >>>>>>>> 73, Garey - K4OAH
> >>>>>>>> Glen Allen, VA
> >>>>>>>>
> >>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>> <www.k4oah.com>
> >>>>>>>>
> >>>>>>>> slowcountry1 wrote:
> >>>>>>>>> Garey,
> >>>>>>>>>
> >>>>>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1
When I switch to CW-tune and the other switch not in the X position, I can adjust the bias
up and down without issue and then hit .1 as required by the manual. This is the first step
I did when I started working on the receiver section.
> >>>>>>>>>
> >>>>>>>>> Thanks,
> >>>>>>>>>
> >>>>>>>>> Doug N9XTF
> >>>>>>>>>
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
> > >
> > >
> > >

> >
>

13213. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-14 23:52:54 UTC
From: matt.newman10
Topic: 2620 Message: 13213

Hi Rich,

Directly above the bar code is the number associated with Tremclad Semi-Gloss. It is 270S26B522. The Barcode Number is 6321300541.

Tremclad is a Rustoleum product.

The only abrasive I use is the kitchen variety 3M souring pad - when washing the enclosures.

Vy 73,

Matt Newman, VA3MGN/AA1VN

--- In DrakeRadio@yahoogroups.com, Rich Arland <k7sz@...> wrote:
>
> Matt:
>
> Is there any number associated with the Tremclad Semi-Gloss paint??
>
> I have a 2B, two TR-4s and an RV-4 to repaint!!
>
> Vy 73
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
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>
>
> Aldo,
>
>
>
> I have been using Tremclad Semi-Gloss on my TR-4, Drake twins, and one PS enclosure with excellents results. Hard and resiliant. Holds up over time. Looks great. I wash the encloures in hot soapy water and rinse thoroughly. Pat dry with paper towels, blow dry with a hair dryer and let stand. Be sure the area inside the folds are thoroughly dry. Before I wash, I remove any rust in the scratches or elsewhere with a fine abrasive.
>
>
>
> Follow the Tremclad instuctions - for example, apply second coat within one hour, then only after 48 hours. This is important. Hope this might help. Good luck with your TR-4C.
>
>
>
> vy7273, Matt - VA3MGN
>
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>
>
> [Non-text portions of this message have been removed]
>

13214. Re: [DrakeRadio] Re: TR-7A howling in speaker, no RX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 02:24:47 UTC
From: Trevor Liburd
Topic: 13086 Message: 13214

Garey,

Will do,

v44kai.....Joel.

On Sun, Apr 14, 2013 at 3:45 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> I don't remember, seems like it was in the 300 - 350 ma range. Floyd,
> K8AC had an article on WB4HFN's site describing fixing up a PA. I
> believe he used those devices, you might want to look up that article.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Trevor Liburd wrote:
> > Ok Garey,
> >
> > The 2879 I think used in the ts 430/440 I should have a couple, will look
> > in my stock, is the Bias the same for the 2879?
> >
> > Thanks,
> >
> > v44kai.....Joel,
> >
> >
> > On Sun, Apr 14, 2013 at 3:24 PM, Garey Barrell <k4oah@...>
> wrote:
> >
> >> **
>
> >>
> >>
> >> Joel -
> >>
> >> I have used 2SC1969's for Drivers ($32 for matched pair)
> >>
> >> PA is 2SC2879(A) ($35 each)

> >>
> >> RF Parts <www.rfparts.com> stocks them.
> >>
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> Trevor Liburd wrote:
> >>> Hi guys,
> >>>
> >>> The rig works ok in RX, I lost the PA finals, I don't see these the
> >>> SRF-2337 in RF parts listing, the ones in this PA are moto product but
> >>> part number on the transistors are A-4017, any idea, someone mod the PA
> >>> with a sub? I see they mod the PTO and Meter lamps and wire them in
> >> series
> >>> and used two 6.3v lamps,
> >>>
> >>> what are you guys using to replaced the finals in the PA?
> >>>
> >>> v44kai.....Joel.
> >>>
> >>>
> >>>
> >>> On Sat, Apr 13, 2013 at 6:03 PM, Trevor Liburd <v44kai@...>
> wrote:
> >>>
> >>>> Ok good Garey, I should have a few 4007 somewhere, will look later
> >> tonight
> >>>> when I returned home, remember Garey I can't nowhere on the island to
> >>>> purchase electronic component,
> >>>>
> >>>> Thanks,
> >>>>
> >>>> v44kai.....Joel
> >>>>
> >>>>
> >>>> On Sat, Apr 13, 2013 at 5:46 PM, Garey Barrell <k4oah@...
> >>> wrote:
> >>>>> **
> >>>>>
> >>>>> You won't know until you check sensitivity, but certainly good enough
> >>>>> to keep troubleshooting!
> >>>>>
> >>>>>
> >>>>> 73, Garey - K4OAH
> >>>>> Glen Allen, VA

> >>>>>
> >>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>> and TR-4/C Service Supplement CDs
> >>>>> <www.k4oah.com>
> >>>>>
> >>>>> Trevor Liburd wrote:
> >>>>>> Hi guys,
> >>>>>>
> >>>>>> Found some 1N-4937 that I use to use in my TV and VCR repairs, a
> long
> >>>>> time
> >>>>>> ago, they are Schottky rectifier fast speed switching, that worked
> so
> >>>>> far,
> >>>>>> and the receiver is back to life,
> >>>>>>
> >>>>>> I will run the rx a while before I connect back the components in
> the
> >> PA
> >>>>>> unit to make sure that the PA works, will keep you'll updated,
> >>>>>>
> >>>>>> v44kai.....Joel.
> >>>>>>
> >>>>>>
> >>>>>> On Sat, Apr 13, 2013 at 1:51 PM, Garey Barrell <
> k4oah@mindspring.com>
> >>>>> wrote:
> >>>>>>> **
> >>>>>>>
> >>>>>>> The 1N4007 is a better sub, as it IS a PIN structure diode. It is
> in
> >>>>>>> the signal path right at the front end, so a common diode may be
> >>>>>>> problematic.
> >>>>>>>
> >>>>>>>
> >>>>>>> 73, Garey - K4OAH
> >>>>>>> Glen Allen, VA
> >>>>>>>
> >>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>> <www.k4oah.com>
> >>>>>>>
> >>>>>>>
> >>>>>
> >>>>
> >>>> --
> >>>> v44kai.....Joel.
> >>>>
> >>>
> >>

> >>
> >
> >
>
>
>

--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13215. Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 14:45:25 UTC
From: drelectrode
Topic: 13215 Message: 13215

I'm new to the group. Just picked up a very nice later version R-4C on eBay but it turns out to have a blown audio transformer. I've never run into that before and was wondering if anyone knows of a source for the part or if there's someone out there who specializes in Drake repairs and might have parts radios. Thanks much in advance for the help.

Larry N3OJD

13216. Re: Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:25:08 UTC
From: Bill Breeden - NA5DX
Topic: 13185 Message: 13216

Gary,

I completely agree. I purchased an FS-4 new in the late 70's. Used it with an R-4B for tropical band DXing, Utility DXing, general shortwave listening. It was the only disappointing product from Drake that I ever owned and a definite downgrade from band crystals in the 4 Line. In addition to the noise that came over on the cable to the crystal sockets, it radiated lots of garbage from the AC cord that my wire antenna could hear. I was able to reduce some of the radiated noise by adding bypass capacitors to the AC cord, but not nearly enough. Still have an R-4A, an R-4B and an SPR-4, but no FS-4.

73,

Bill - NA5DX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Either way will 'work', but there will be LOTS of spurious signals.
> Definitely 'Receive ONLY'.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Charles Ring wrote:
> > The SPR-4 might be different, but I'd like to know the result of putting
> > an FS-4 on 5.0 MHz to cover 60 meters (receive only), on a R-4x. Is it
> > locked out on the FS-4? Does it work? That should tell me what to expect
> > if I get a crystal to cover 5.0 to 5.5 MHz on my R-4C. I know to not try
> > to transmit there with the 4 line.
> >
> > 73 de W3NU
> >
> >
> >
> > On 4/14/2013 0944, dickbolt@... wrote:
> >> I finally decided to part with my Drake FS-4 Synthesizer & soon the
> >> SPR4 that goes with it. It seems I did not put it on ebay correctly as
> >> its not in the Drake section of Ham Receivers!
> >>
> >> http://www.ebay.com/itm/Drake-Radio-FS-4-Frequency-Synthesizer-/111049376198?pt=LH_DefaultDomain_0&hash=item19db0f01c6
> >> Dick
> >>

> >
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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>

13217. Re: [DrakeRadio] Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:28:07 UTC
From: Paul Christensen
Topic: 13215 Message: 13217

Larry,

I would seize the opportunity to upgrade the R-4C's audio path and take time in finding a replacement transformer to keep on hand in the event of a future sale. Of course, if the R-4C is in mint condition, any mod should be made so that it's reversible with no "residue" left behind. There are several possibilities:

1) Use Sherwood's AMP-4 kit. Or, build your own using a LM380/LM383/TDA-series audio amp. When using any of these devices, my experience has been that hum/buzz rejection is greatly improved with wiring care, but residual hiss may be objectionable when using modern headphones. You can use an in-line headphone attenuator and dial-in the amount of attenuation that reduces hiss to an acceptable level. Of course, as a trade-off, the amp is working harder and the source Z into headphones increases but this is rarely a problem. Radio Shack and on-line sources sell these. Any of the changes below will also result in reduced cabinet heating.

2) Through a coupling cap, bring the AF Control wiper arm out to a spare rear panel RCA jack (or pig-tail jack to avoid drilling a hole). Then use a high quality external amp like a used Marantz;

3) Construct a simple push-pull audio amp using low-noise transistors. For ultra-simplicity, I like the KK7B design that uses headroom boosting emitter caps. See http://www.qrp.pops.net/af-amp-2008.asp ;

4) Construct a low-noise, precision Class-AB amp using one of several designs. Generally, these designs use 2-3 biasing diodes to allow a small amount of collector-emitter current to flow in the absence of an input signal. These designs run very cool and have very low noise/distortion characteristics, owing to the use of the diodes and low-noise-figure transistors in the high-gain stages. I'm using the SM0VPO amp design. The circuit board is available from FAR Circuits and component values as well as the schematic are available on the SM0VPO website.

If you primarily use modern stereo headphones, consider replacing the mono headphone jack with an enclosed Switchcraft or Neutrik Tip-Ring-Sleeve (TRS) stereo type. I would avoid the simple open-frame jacks. Feed the R-4C output audio to both L and R channels. Now, you'll never need a mono-to-stereo adapter. If you have an old set of phones with a Tip-Sleeve plug, that will require replacement with a TRS type plug -- or use an adapter in those rare instances.

Paul, W9AC

----- Original Message -----
From: drelectrode
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 15, 2013 10:45 AM
Subject: [DrakeRadio] Parts R-4C? Need audio transformer

I'm new to the group. Just picked up a very nice later version R-4C on eBay but it turns out to have a blown audio transformer. I've never run into that before and was wondering if anyone knows of a source for the part or if there's someone out there who specializes in Drake repairs and might have parts radios. Thanks much in advance for the help.

Larry N3OJD

[Non-text portions of this message have been removed]

13218. Re: [DrakeRadio] Re: Drake FS-4 On Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:31:26 UTC
From: Eddy Swynar
Topic: 13185 Message: 13218

On 2013-04-15, at 11:25 AM, Bill Breeden - NA5DX wrote:

>
>
> I completely agree. I purchased an FS-4 new in the late 70's. Used it with an R-4B for tropical band DXing, Utility DXing, general shortwave listening. It was the only disappointing product from Drake that I ever owned and a definite downgrade from band crystals in the 4 Line. In addition to the noise that came over on the cable to the crystal sockets, it radiated lots of garbage from the AC cord that my wire antenna could hear. I was able to reduce some of the radiated noise by adding bypass capacitors to the AC cord, but not nearly enough. Still have an R-4A, an R-4B and an SPR-4, but no FS-4.
>
>

Hi Bill,

You & Gary have made me feel so much better now, by my passing-up on the $75.00 FS-4 like I did here a coupla years ago...

Seriously!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

13219. Re: [DrakeRadio] Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:32:48 UTC
From: Garey Barrell
Topic: 13215 Message: 13219

Larry -

I don't have a transformer, but fyi the p/n is CT-686-A, and the Drake number is 369-100. Your want on this list is seen by 1000 Drake people, so you should be able to come up with one.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

drelectrode wrote:
> I'm new to the group. Just picked up a very nice later version R-4C on eBay but it turns out to have a blown audio transformer. I've never run into that before and was wondering if anyone knows of a source for the part or if there's someone out there who specializes in Drake repairs and might have parts radios. Thanks much in advance for the help.
>
> Larry N3OJD
>
>

13220. Re: [DrakeRadio] Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:36:05 UTC
From: Garey Barrell
Topic: 13215 Message: 13220

Paul -

With your upgrade, where do you obtain the 'ANTI-VOX' output? The
Drake transformer has a third Hi-Z winding for this.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Christensen wrote:
> Larry,
>
> I would seize the opportunity to upgrade the R-4C's audio path and take time in finding a replacement transformer to keep on hand in the event of a future sale. Of course, if the R-4C is in mint condition, any mod should be made so that it's reversible with no "residue" left behind. There are several possibilities:
>
> 1) Use Sherwood's AMP-4 kit. Or, build your own using a LM380/LM383/TDA-series audio amp. When using any of these devices, my experience has been that hum/buzz rejection is greatly improved with wiring care, but residual hiss may be objectionable when using modern headphones. You can use an in-line headphone attenuator and dial-in the amount of attenuation that reduces hiss to an acceptable level. Of course, as a trade-off, the amp is working harder and the source Z into headphones increases but this is rarely a problem. Radio Shack and on-line sources sell these. Any of the changes below will also result in reduced cabinet heating.
>
> 2) Through a coupling cap, bring the AF Control wiper arm out to a spare rear panel RCA jack (or pig-tail jack to avoid drilling a hole). Then use a high quality external amp like a used Marantz;
>
> 3) Construct a simple push-pull audio amp using low-noise transistors. For ultra-simplicity, I like the KK7B design that uses headroom boosting emitter caps. See http://www.qrp.pops.net/af-amp-2008.asp ;
>
> 4) Construct a low-noise, precision Class-AB amp using one of several designs. Generally, these designs use 2-3 biasing diodes to allow a small amount of collector-emitter current to flow in the absence of an input signal. These designs run very cool and have very low noise/distortion characteristics, owing to the use of the diodes and low-noise-figure transistors in the high-gain stages. I'm using the SM0VPO amp design. The circuit board is available from FAR Circuits and component values as well as the schematic are available on the SM0VPO website.
>
> If you primarily use modern stereo headphones, consider replacing the mono headphone jack

with an enclosed Switchcraft or Neutrik Tip-Ring-Sleeve (TRS) stereo type. I would avoid the simple open-frame jacks. Feed the R-4C output audio to both L and R channels. Now, you'll never need a mono-to-stereo adapter. If you have an old set of phones with a Tip-Sleeve plug, that will require replacement with a TRS type plug -- or use an adapter in those rare instances.
>
> Paul, W9AC
>
>
> ----- Original Message -----
> From: drelectrode
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, April 15, 2013 10:45 AM
> Subject: [DrakeRadio] Parts R-4C? Need audio transformer
>
>
>
> I'm new to the group. Just picked up a very nice later version R-4C on eBay but it turns out to have a blown audio transformer. I've never run into that before and was wondering if anyone knows of a source for the part or if there's someone out there who specializes in Drake repairs and might have parts radios. Thanks much in advance for the help.
>
> Larry N3OJD
>
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13221. Re: [DrakeRadio] Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:44:33 UTC
From: Dan Galligan
Topic: 13215 Message: 13221

Larry,
I just checked the webpage of the fellow I bought my power transformer, for the R4C I rebuilt last year. He has it for $14USD.
members.tripod.com/tubes_tubes_tubes/id212.html

Dan Galligan
W3RXO/W6
w3rxo@...
Real radios glow in the dark
Member-Collins Collector's Assoc.
Member-Collins Radio Assoc.
Member-Amplitude Modulation Int'l.
Collector of Drake, Collins and other fine AMERICAN made, tube-type radios.

13222. Re: [DrakeRadio] Parts R-4C? Need audio transformer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 15:46:42 UTC
From: Paul Christensen
Topic: 13215 Message: 13222

Garey,

I moved C104 (0.01 uF) right to the amp output. I don't recall how Sherwood does it with his AMP-4 kit but it's likely the same.

The same method can be used in the R-4B (after upgrading the PS), using C122 and keeping R/C filter termination of C204/R95.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 15, 2013 11:36 AM
Subject: Re: [DrakeRadio] Parts R-4C? Need audio transformer

Paul -

With your upgrade, where do you obtain the 'ANTI-VOX' output? The
Drake transformer has a third Hi-Z winding for this.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Christensen wrote:
> Larry,
>
> I would seize the opportunity to upgrade the R-4C's audio path and take time in finding a replacement transformer to keep on hand in the event of a future sale. Of course, if the R-4C is in mint condition, any mod should be made so that it's reversible with no "residue" left behind. There are several possibilities:
>
> 1) Use Sherwood's AMP-4 kit. Or, build your own using a LM380/LM383/TDA-series audio amp. When using any of these devices, my experience has been that hum/buzz rejection is greatly improved with wiring care, but residual hiss may be objectionable when using modern headphones. You can use an in-line headphone attenuator and dial-in the amount of attenuation that reduces hiss to an acceptable level. Of course, as a trade-off, the amp is working harder and the source Z into headphones increases but this is rarely a problem. Radio Shack and on-line sources sell these. Any of the changes below will also result in reduced cabinet heating.
>
> 2) Through a coupling cap, bring the AF Control wiper arm out to a spare rear panel RCA jack (or pig-tail jack to avoid drilling a hole). Then use a high quality external amp like

a used Marantz;
>
> 3) Construct a simple push-pull audio amp using low-noise transistors. For ultra-simplicity, I like the KK7B design that uses headroom boosting emitter caps. See http://www.qrp.pops.net/af-amp-2008.asp ;
>
> 4) Construct a low-noise, precision Class-AB amp using one of several designs. Generally, these designs use 2-3 biasing diodes to allow a small amount of collector-emitter current to flow in the absence of an input signal. These designs run very cool and have very low noise/distortion characteristics, owing to the use of the diodes and low-noise-figure transistors in the high-gain stages. I'm using the SM0VPO amp design. The circuit board is available from FAR Circuits and component values as well as the schematic are available on the SM0VPO website.
>
> If you primarily use modern stereo headphones, consider replacing the mono headphone jack with an enclosed Switchcraft or Neutrik Tip-Ring-Sleeve (TRS) stereo type. I would avoid the simple open-frame jacks. Feed the R-4C output audio to both L and R channels. Now, you'll never need a mono-to-stereo adapter. If you have an old set of phones with a Tip-Sleeve plug, that will require replacement with a TRS type plug -- or use an adapter in those rare instances.
>
> Paul, W9AC
>
>
> ----- Original Message -----
> From: drelectrode
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, April 15, 2013 10:45 AM
> Subject: [DrakeRadio] Parts R-4C? Need audio transformer
>
>
>
> I'm new to the group. Just picked up a very nice later version R-4C on eBay but it turns out to have a blown audio transformer. I've never run into that before and was wondering if anyone knows of a source for the part or if there's someone out there who specializes in Drake repairs and might have parts radios. Thanks much in advance for the help.
>
> Larry N3OJD
>
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13223. TR-7 howling

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 16:32:36 UTC
From: John Sehring
Topic: 13223 Message: 13223

Howdy,

Statement made here that 1N4007 diode is different from others in this line, having a PIN-type junction.

Looking at link for 1N400_ below, I don't see any of that:

 https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHMm3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ

only that the 1N4005 to 1N4007 have a lower junction capacitance vs. applied voltage characteristic than 1N4001 to 1N4004.

So...whatsay?

--John Sehring WB0EQ-VE6EQR   nr Calgary, Alberta, Canada

13224. TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 16:48:31 UTC
From: John Sehring
Topic: 13224 Message: 13224

I could not agree more with you!

Absolutely the best place to spend $$ is on the antenna. This fact is hardly on the mind of most. They think they need megabuck radios--not!

A friend just put Drake Twins on the air. His comment, funny thing, these radios hear just as good as my IcYeasWood expensive radio.

Yes, within its limitations, the R-4B is just fine, IMO. Of course, less so in contests. I find a good external DSP-driven audio filter is very useful on these radios. I use the Timewave 59+, are now pretty cheap used.

And you can fix the radio yourself.

Basically, I don't want anything in my shack that I cannot repair!

Too bad about slim ham population. Yes, no QRM but lonely, no? I've lived in the most sparsely populated places in North America. We had 3 hams in whole county, size = 100 mi. x 100 mi. One moved away, one SK'd, well...

>A friend in the UK keeps on at me to buy some new gear, but it is so expensive in NZ its unreal and no back up service of any value, >so why should I get a FT1000 or better at 10 times the price and zero times the repairability. Reckon the best place to spend money is up in air on antennas. Will see if I can catch this one, and report back.

>A good Datong audio filter sorts out many of the audio issues.

>Also not a great Ham population up here, think I am the only one on HF within 30 or 40 miles, so no nearby problems.

--John Sehring WB0EQ-VE6EQR   nr Calgary, Alberta, Canada

13225. Re: [DrakeRadio] TR-7 howling

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 16:50:32 UTC
From: Garey Barrell
Topic: 13223 Message: 13225

John -

I don't know where itwas first mentioned, but it was a 'reliable'
source. My understanding was that it was ONLY the 1N4007 that used
this internal structure. I believe they were used in a few
manufactured transceivers before 'real' PIN diodes came down in price.

Perhaps it's not mentioned in data sheets because it has no relevance
in rectification.?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
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>
> Statement made here that 1N4007 diode is different from others in this line, having a PIN-type junction.
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> Looking at link for 1N400_ below, I don't see any of that:
>
> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHMm3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
>
> only that the 1N4005 to 1N4007 have a lower junction capacitance vs. applied voltage characteristic than 1N4001 to 1N4004.
>
> So...whatsay?
>
> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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> Yahoo! Groups Links
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13226. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 17:12:39 UTC
From: Garey Barrell
Topic: 13223 Message: 13226

John -

Your post got my curiosities up. It appears that the internal structure of the 1N4007 is 'similar' to the structure of true PIN diodes. The diode has a wider than typical intrinsic area between the P and N of the junction, which amongother things, reduces the capacitive coupling in the OFF state. Elecraft is one manufacturer who used them as RF switches in the K2.

Clifton Laboratories did a pretty complete evaluation of the 1N4007 and some other diodes.

<http://www.cliftonlaboratories.com/diode_turn-on_time.htm>

I interpret the results as 'it works, but not as well as a "real" PIN diode!' Kinda what I thought.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> only that the 1N4005 to 1N4007 have a lower junction capacitance vs. applied voltage characteristic than 1N4001 to 1N4004.
>
> So...whatsay?
>
> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
>
>

13227. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 19:07:00 UTC
From: Paul Kraemer
Topic: 13223 Message: 13227

Interesting
I know an old time op that designed and built a QSK tr switch around the 1N4xxx diodes, and a lot of other components and transistors. I have a schematic---someplace around here
He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was only rig that could keep up with him and the rig topped out at 87wpm. I have seen him operate and it is pure pleasure to observe.
Navy telegrapher (ret) in sub marine service. You may know him, Lyle, lives in Galesburg IL.
Paul K0UYA

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 12:12 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

> John -
>
> Your post got my curiosities up. It appears that the internal
> structure of the 1N4007 is 'similar' to the structure of true PIN
> diodes. The diode has a wider than typical intrinsic area between the
> P and N of the junction, which amongother things, reduces the
> capacitive coupling in the OFF state. Elecraft is one manufacturer who
> used them as RF switches in the K2.
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> Clifton Laboratories did a pretty complete evaluation of the 1N4007
> and some other diodes.
>
> <http://www.cliftonlaboratories.com/diode_turn-on_time.htm>
>
> I interpret the results as 'it works, but not as well as a "real" PIN
> diode!' Kinda what I thought.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> John Sehring wrote:
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>> line, having a PIN-type junction.
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>>
>>
>> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHMm3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
>>
>> only that the 1N4005 to 1N4007 have a lower junction capacitance vs.
>> applied voltage characteristic than 1N4001 to 1N4004.
>>
>> So...whatsay?
>>
>> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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> Yahoo! Groups Links
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13228. More Quigs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 19:44:32 UTC
From: greenmoldydonuts
Topic: 13228 Message: 13228

Amazing! Was telling the XYL about quigs and what they were for and what they looked like. Today she brings down a wooden jewelry box that I got at a yard sale 20 years ago with little divider trays inside, and said, "You never did tell me what all these little springs are for!"
There were 144 quigs!! I quickly and appreciatively appropriated them for my use...giving her three more little sections in her jewelry box to fill....but I still need to glue her ear-ring back together.

A great day!

Bernie in ND
WD0GMD

13229. RE: [DrakeRadio] More Quigs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 19:53:53 UTC
From: Ian Reeve
Topic: 13228 Message: 13229

Very Interesting to read this, have been using these for some time now (home brew ones) but discovered our local sewing shop sold them as part of their range of jewellery or more specifically drop earring components. Have yet to see if they are solderable but the lady says they are silver plated so should be OK. Would therefore assume that most hobby shops that deal with beads and that sort of thing would keep them.

73 de M0IDR

Ian

Ian Reeve M?IDR

To: DrakeRadio@yahoogroups.com
From: barcand@...
Date: Mon, 15 Apr 2013 19:44:32 +0000
Subject: [DrakeRadio] More Quigs

Amazing! Was telling the XYL about quigs and what they were for and what they looked like. Today she brings down a wooden jewelry box that I got at a yard sale 20 years ago with little divider trays inside, and said, "You never did tell me what all these little springs are for!"

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Bernie in ND

WD0GMD

[Non-text portions of this message have been removed]

13230. Re: [DrakeRadio] More Quigs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 20:40:44 UTC
From: Dan Galligan
Topic: 13228 Message: 13230

Bernie,
You do realize, that means you'll now have to buy her jewelry, to fill the empty spaces. Fortunately, for you, that gold and silver tanked, today. Jewelry should be a steal, at the current market prices.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, like we are currently experiencing, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my relatively bright, electronic leash.

On Apr 15, 2013, at 12:44, greenmoldydonuts <barcand@nccray.com> wrote:

Amazing! Was telling the XYL about quigs and what they were for and what they looked like. Today she brings down a wooden jewelry box that I got at a yard sale 20 years ago with little divider trays inside, and said, "You never did tell me what all these little springs are for!"
There were 144 quigs!! I quickly and appreciatively appropriated them for my use...giving her three more little sections in her jewelry box to fill....but I still need to glue her ear-ring back together.

A great day!

Bernie in ND
WD0GMD

Yahoo! Groups Links

13231. Re: [DrakeRadio] More Quigs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-15 22:26:58 UTC
From: Richard Knoppow
Topic: 13228 Message: 13231

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 1:40 PM
Subject: Re: [DrakeRadio] More Quigs

> Bernie,
> You do realize, that means you'll now have to buy her
> jewelry, to fill the empty spaces.
> Fortunately, for you, that gold and silver tanked, today.
> Jewelry should be a steal, at the current market prices.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb

But you better steal it quigly...

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13232. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 00:41:53 UTC
From: Robert Spooner
Topic: 13223 Message: 13232

Paul,

If you find the schematic, I would very much like to have a copy. I'd like to build a solid state TR switch to use with my station.

73,
Bob AD3K

On Apr 15, 2013, at 3:07 PM, Paul Kraemer <elespe@...> wrote:

> Interesting
> I know an old time op that designed and built a QSK tr switch around the
> 1N4xxx diodes, and a lot of other components and transistors. I have a
> schematic---someplace around here
> He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was only
> rig that could keep up with him and the rig topped out at 87wpm. I have
> seen him operate and it is pure pleasure to observe.
> Navy telegrapher (ret) in sub marine service. You may know him, Lyle, lives
> in Galesburg IL.
> Paul K0UYA
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, April 15, 2013 12:12 PM
> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
>
> > John -
> > >
> > Your post got my curiosities up. It appears that the internal
> > structure of the 1N4007 is 'similar' to the structure of true PIN
> > diodes. The diode has a wider than typical intrinsic area between the
> > P and N of the junction, which amongother things, reduces the
> > capacitive coupling in the OFF state. Elecraft is one manufacturer who
> > used them as RF switches in the K2.
> > >
> > Clifton Laboratories did a pretty complete evaluation of the 1N4007
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> >> Statement made here that 1N4007 diode is different from others in this
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> >>
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> > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13233. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 01:00:39 UTC
From: Paul Christensen
Topic: 13223 Message: 13233

Bob,

K9EW has developed a PIN T/R switch for use with his boatanchor QSK system:

http://www.k9ew.us/images/baqsk_tr_switch.jpg

Notice that he's using 1N4007 diodes with 135VDC bias. As transmit power is increased, the diodes require a further increase in bias voltage. This is important to offset the effects transmission line voltage with moderately high SWR. In the Ameritron QSK-5, true PIN diodes are use along with about 800VDC bias so the diodes stay in conduction at the 2KW power level.

Paul, W9AC

----- Original Message -----
From: "Robert Spooner" <rls19@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 8:41 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

> Paul,
>
> If you find the schematic, I would very much like to have a copy. I'd like
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>
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>> From: "Garey Barrell" <k4oah@...>
>> To: <DrakeRadio@yahoogroups.com>

>> Sent: Monday, April 15, 2013 12:12 PM
>> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
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>> >> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds
28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7
-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHM
m3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
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> [Non-text portions of this message have been removed]
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13234. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 01:09:53 UTC
From: Paul Kraemer
Topic: 13223 Message: 13234

I'll look for it and let everyone know when it surfaces
Paul
----- Original Message -----
From: "Robert Spooner" <rls19@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 7:41 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

> Paul,
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> On Apr 15, 2013, at 3:07 PM, Paul Kraemer <elespe@...> wrote:
>
>> Interesting
>> I know an old time op that designed and built a QSK tr switch around the
>> 1N4xxx diodes, and a lot of other components and transistors. I have a
>> schematic---someplace around here
>> He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was
>> only
>> rig that could keep up with him and the rig topped out at 87wpm. I have
>> seen him operate and it is pure pleasure to observe.
>> Navy telegrapher (ret) in sub marine service. You may know him, Lyle,
>> lives
>> in Galesburg IL.
>> Paul K0UYA
>>
>> ----- Original Message -----
>> From: "Garey Barrell" <k4oah@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Monday, April 15, 2013 12:12 PM
>> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
>>
>> > John -
>> >
>> > Your post got my curiosities up. It appears that the internal
>> > structure of the 1N4007 is 'similar' to the structure of true PIN
>> > diodes. The diode has a wider than typical intrinsic area between the
>> > P and N of the junction, which amongother things, reduces the
>> > capacitive coupling in the OFF state. Elecraft is one manufacturer who
>> > used them as RF switches in the K2.

>> >
>> > Clifton Laboratories did a pretty complete evaluation of the 1N4007
>> > and some other diodes.
>> >
>> > <http://www.cliftonlaboratories.com/diode_turn-on_time.htm>
>> >
>> > I interpret the results as 'it works, but not as well as a "real" PIN
>> > diode!' Kinda what I thought.....
>> >
>> > 73, Garey - K4OAH
>> > Glen Allen, VA
>> >
>> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> > and TR-4/C Service Supplement CDs
>> > <www.k4oah.com>
>> >
>> > John Sehring wrote:
>> >> Howdy,
>> >>
>> >> Statement made here that 1N4007 diode is different from others in this
>> >> line, having a PIN-type junction.
>> >>
>> >> Looking at link for 1N400_ below, I don't see any of that:
>> >>
>> >>
>> >> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds
28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7
-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHM
m3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
>> >>
>> >> only that the 1N4005 to 1N4007 have a lower junction capacitance vs.
>> >> applied voltage characteristic than 1N4001 to 1N4004.
>> >>
>> >> So...whatsay?
>> >>
>> >> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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13235. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 02:06:29 UTC
From: Paul Christensen
Topic: 13223 Message: 13235

I had almost forgotten that K9EW's PIN T/R circuit originated with an article written for Ham Radio Magazine in the mid '70s:

Boomer, J.K. (W9KHC), "PIN Transmit/Receive Switch for 80 - 10 Meters," Ham Radio, May 1976, p.10. The Schematic from that article is shown in the link below. K9EW then substituted 1N4007 diodes for the Unitrode UM4004 PIN type as described in W9KHC's HR article:

http://www.seekic.com/uploadfile/ic-circuit/2009713232225121.gif

Another article that may be of interest is from W6RM. This construction article describes a complex syllabic vox system.

Hithcock, R.W., "VOX System for Drake Equipment," Ham Radio, August 1976, p. 24.

Anyone getting this far may want to read a series of QST and HR articles by Romel Hildreth, K0HZF, that began in the early '60s and conclude in the late '70s. It's interesting to read through the evolution of Hildreth's quest for fast QSK/VOX with his S/Line gear. At the end of it all, he had perfected what amounts to a near full-duplex switching system using classic separates.

Paul, W9AC

----- Original Message -----
From: Paul Christensen
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 15, 2013 9:00 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

Bob,

K9EW has developed a PIN T/R switch for use with his boatanchor QSK system:

http://www.k9ew.us/images/baqsk_tr_switch.jpg

Notice that he's using 1N4007 diodes with 135VDC bias. As transmit power is increased, the diodes require a further increase in bias voltage. This is important to offset the effects transmission line voltage with moderately high SWR. In the Ameritron QSK-5, true PIN diodes are use along with about 800VDC bias so the diodes stay in conduction at the 2KW power level.

Paul, W9AC

----- Original Message -----
From: "Robert Spooner" <rls19@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 8:41 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

> Paul,
>
> If you find the schematic, I would very much like to have a copy. I'd like
> to build a solid state TR switch to use with my station.
>
> 73,
> Bob AD3K
>
> On Apr 15, 2013, at 3:07 PM, Paul Kraemer <elespe@...> wrote:
>
>> Interesting
>> I know an old time op that designed and built a QSK tr switch around the
>> 1N4xxx diodes, and a lot of other components and transistors. I have a
>> schematic---someplace around here
>> He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was
>> only
>> rig that could keep up with him and the rig topped out at 87wpm. I have
>> seen him operate and it is pure pleasure to observe.
>> Navy telegrapher (ret) in sub marine service. You may know him, Lyle,
>> lives
>> in Galesburg IL.
>> Paul K0UYA
>>
>> ----- Original Message -----
>> From: "Garey Barrell" <k4oah@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Monday, April 15, 2013 12:12 PM
>> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
>>
>> > John -
>> >
>> > Your post got my curiosities up. It appears that the internal
>> > structure of the 1N4007 is 'similar' to the structure of true PIN
>> > diodes. The diode has a wider than typical intrinsic area between the
>> > P and N of the junction, which amongother things, reduces the
>> > capacitive coupling in the OFF state. Elecraft is one manufacturer who
>> > used them as RF switches in the K2.
>> >
>> > Clifton Laboratories did a pretty complete evaluation of the 1N4007
>> > and some other diodes.
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>> > <http://www.cliftonlaboratories.com/diode_turn-on_time.htm>
>> >
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>> >>
>> >> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds
28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7
-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHM
m3xPvD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
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>> >> only that the 1N4005 to 1N4007 have a lower junction capacitance vs.
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>> >> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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13236. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 02:20:34 UTC
From: Paul Kraemer
Topic: 13223 Message: 13236

Interesting to note that the circuit linked looks a lot like what I remember Lyle's looked like---except this one is easier to follow!
Also Lyle had some circuitry to key the screen on the 4CX1000
Paul K0UYA
----- Original Message -----
From: "Paul Christensen" <w9ac@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, April 15, 2013 9:06 PM
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

>I had almost forgotten that K9EW's PIN T/R circuit originated with an
>article written for Ham Radio Magazine in the mid '70s:
>
> Boomer, J.K. (W9KHC), "PIN Transmit/Receive Switch for 80 - 10 Meters,"
> Ham Radio, May 1976, p.10. The Schematic from that article is shown in
> the link below. K9EW then substituted 1N4007 diodes for the Unitrode
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> http://www.seekic.com/uploadfile/ic-circuit/2009713232225121.gif
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> Hithcock, R.W., "VOX System for Drake Equipment," Ham Radio, August 1976,
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> quest for fast QSK/VOX with his S/Line gear. At the end of it all, he had
> perfected what amounts to a near full-duplex switching system using
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>
> Paul, W9AC
>
>
>
> ----- Original Message -----
> From: Paul Christensen
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, April 15, 2013 9:00 PM
> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
>
>
>

> Bob,
>
> K9EW has developed a PIN T/R switch for use with his boatanchor QSK
> system:
>
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>
> Notice that he's using 1N4007 diodes with 135VDC bias. As transmit power
> is
> increased, the diodes require a further increase in bias voltage. This is
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> ----- Original Message -----
> From: "Robert Spooner" <rls19@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, April 15, 2013 8:41 PM
> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
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> > Paul,
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> > If you find the schematic, I would very much like to have a copy. I'd
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> > On Apr 15, 2013, at 3:07 PM, Paul Kraemer <elespe@...> wrote:
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> >> schematic---someplace around here
> >> He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was
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> >> rig that could keep up with him and the rig topped out at 87wpm. I
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> >> Navy telegrapher (ret) in sub marine service. You may know him, Lyle,
> >> lives
> >> in Galesburg IL.
> >> Paul K0UYA
> >>
> >> ----- Original Message -----

> >> From: "Garey Barrell" <k4oah@...>
> >> To: <DrakeRadio@yahoogroups.com>
> >> Sent: Monday, April 15, 2013 12:12 PM
> >> Subject: Re: [DrakeRadio] 1N4007 as PIN Diode
> >>
> >> > John -
> >> >
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> >> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >> > John Sehring wrote:
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> >> >>
> >> >> Looking at link for 1N400_ below, I don't see any of that:
> >> >>
> >> >>
> >> >>
> >> >> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds2800
2.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7-qee
MbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHMm3xP
vD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
> >> >>
> >> >> only that the 1N4005 to 1N4007 have a lower junction capacitance
> vs.

> >> >> applied voltage characteristic than 1N4001 to 1N4004.
> >> >>
> >> >> So...whatsay?
> >> >>
> >> >> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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13237. Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 03:56:48 UTC
From: W7VH
Topic: 13237 Message: 13237

Hi,

Do I have any hope at all in finding a functional
Drake Aux-7 board?

Let me know what you think.

Thanks,

Jon
W7VH

13238. Re: [DrakeRadio] Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 04:18:36 UTC
From: Jim Shorney
Topic: 13237 Message: 13238

Your best bet is to find a rig that has one. Otherwise, they can be found occasionally, but be prepared to pay a premium price. There have also been a couple of clones offered over the years, also not cheap. Or, you can roll your own (without the fixed frequency crystal feature):

http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/Homebrew_AUX-7.htm

You can also "fake" an AUX-7 by adding arrays of diodes on the bottom of the parent board, but that gets ugly really fast. Really only practical if you want to add LF 0-1.5 MHz coverage.

It you need the fixed frequency crystal operation feature, you are pretty much stuck with the original AUX-7 unless you want to go to the added trouble of building it.

73

-Jim
NU0C

On Tue, 16 Apr 2013 03:56:48 -0000, W7VH wrote:

>Hi,
>
>Do I have any hope at all in finding a functional
>Drake Aux-7 board?
>
>Let me know what you think.
>
>Thanks,
>
>Jon
>W7VH
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13239. Re: [DrakeRadio] Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 12:41:04 UTC
From: Chgypsy@...
Topic: 13237 Message: 13239

In a message dated 4/15/2013 11:56:50 P.M. Eastern Daylight Time,
jon@... writes:

Hi,
Do I have any hope at all in finding a functional Drake Aux-7 board? Jon
W7VH
Jon,
I happen to have one in its original box. If interested let me know.

Functional is another subject. It has sockets for six crystals if you
want to go that way.
Or you could build the modules (14 pin dips), each one of which would be
for a different frequency range.
Or you could purchase modules (most do). One source for the modules would
be.

http://www.marketworks.com/StoreFrontProfiles/default.aspx?sfid=86409

A second source would be http://www.Radiolabworks.com , look under
products.
73's Carl wd8nhk

[Non-text portions of this message have been removed]

13240. Re: [DrakeRadio] More Quigs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 13:34:54 UTC
From: whitebear1122@...
Topic: 13228 Message: 13240

I just wanted to comment that like others on here, I've also made my own quigs and they work out pretty good. I just wind them on a drill bit shank sized for the connections I need to make, winding some buss wire on it.

I have not had great experience unsoldering components from solder lugs without damage, so if I can't get the existing component lead out, or slip a new lead in the lug, I'll cut the component and leave some lead length, and use a quig. 73, Scott WA9WFA

[Non-text portions of this message have been removed]

13241. Re: [DrakeRadio] TR-7 howling

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-16 13:40:43 UTC
From: Trevor Liburd
Topic: 13223 Message: 13241

Can some Curve trace test help in this, I don't have mind as yet, I'm waiting for PEAK to ship it, but it would be interesting to know, I know a number of components can sub in areas that thee data sheet don't mention as (Garey mentioned) because the designed purpose has no interest in that data,

Maybe I can do some test by using a TG and SA and compare a mpn3404 and a 1N4007, and see what the attenuation of both are,

v44kai.....Joel.

On Mon, Apr 15, 2013 at 12:50 PM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> John -
>
> I don't know where itwas first mentioned, but it was a 'reliable'
> source. My understanding was that it was ONLY the 1N4007 that used
> this internal structure. I believe they were used in a few
> manufactured transceivers before 'real' PIN diodes came down in price.
>
> Perhaps it's not mentioned in data sheets because it has no relevance
> in rectification.?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> John Sehring wrote:
> > Howdy,
> >
> > Statement made here that 1N4007 diode is different from others in this
> line, having a PIN-type junction.
> >
> > Looking at link for 1N400_ below, I don't see any of that:
> >
> >
> https://docs.google.com/viewer?a=v&q=cache:s48Yjf69IzYJ:www.diodes.com/datasheets/ds28002.pdf+1n4007+diode+spec+sheet&hl=en&gl=ca&pid=bl&srcid=ADGEESgMYYjK4CaumC48BZA-Jmwn1p7-qeeMbwnGJl_rb8r6alUMZe0QgQsT0MMwrydxvE259oz6qp_mx-UpCKIZ-1UiBMV4oUJsLlpKyln7TMW7Euu6gzhHMm3xP

vD-wfQf71OF5na7&sig=AHIEtbTCIjaaURN7NZzMN_7x5dK4oqwIrQ
> >
> > only that the 1N4005 to 1N4007 have a lower junction capacitance vs.
> applied voltage characteristic than 1N4001 to 1N4004.
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> > So...whatsay?
> >
> > --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
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--
v44kai.....Joel.

[Non-text portions of this message have been removed]

13242. Re: SL-6000 AM filter for the TR-7?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 00:43:06 UTC
From: W7VH
Topic: 13112 Message: 13242

Hi Peter,

Thanks for th3e advice. I ended up with a different TR7
and it just happens to have an FL-6000 in it so I'm set.

I just have to find a narrow CW filter. It already has
an INRAD 1.8 sideband filter as well.

Thanks,

Jon
W7VH
--- In DrakeRadio@yahoogroups.com, "VE3AX/7" <ve3ax@...> wrote:
>
> Jon:
>
> The AM filter is nice for sure, but much harder to find than some of the others.
>
> In the meantime, try this;
>
> AM Filter
> An AM filter is almost impossible to find. You can fake an AM 'filter' by putting a 390 ohm resistor through the input and output pins of any blank crystal filter position. It actually isn't bad. What is determining the selectivity is the 48 MHz first IF filter.
>
> 73
> Peter
> VE3AX/7
>
> From: W7VH
> Sent: Thursday, April 11, 2013 2:34 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] SL-6000 AM filter for the TR-7?
>
>
> Hi,
>
> I think I've found a nice TR7. It has a normal SSB filter
> and a 300 hz CW filter. I'd like to have an SL-6000 for
> SWL but can't seem to find one anywhere. Does anyone have
> one they'd like to part with?
>
> Contact me offline via the email address below.
>
> Thanks,
>

> Jon
> W7VH
> mailto:jon%40jonneher.com
>
>
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>
> [Non-text portions of this message have been removed]
>

13243. Re: [DrakeRadio] Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 00:56:39 UTC
From: Jim Shorney
Topic: 13237 Message: 13243

I'm not one to criticize someone for making a buck, but I made my own modules. Some of the prices I have seen for a DIP header with a few 1N4148s soldered to it seem a little high. Of course, it helped that I had DIP headers and diodes on hand, but the part are cheap.

73

-Jim
NU0C

On Tue, 16 Apr 2013 08:41:04 -0400 (EDT), Chgypsy@... wrote:

>Or you could build the modules (14 pin dips), each one of which would be
>for a different frequency range.
>Or you could purchase modules (most do). One source for the modules would
>be.
>
>http://www.marketworks.com/StoreFrontProfiles/default.aspx?sfid=86409
>
>A second source would be http://www.Radiolabworks.com , look under
>products.

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

13244. Re: [DrakeRadio] Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 04:36:02 UTC
From: L L bahr
Topic: 13237 Message: 13244

Same here. I bought my TR-7 new with aux-7 board but made my own modules. They work perfect. All you have to do is get a bunch of IC headers. (They are the male plugs that plug into an IC socket. They are made to solder parts onto the back side. They cost a few cents each. You can use the cover over them or not use covers at all). The truth table tells you how to wire the needed 1N914 diodes for any given band segment. Of course the 1N914 diodes cost just a few cents two. In other words you can quickly make up any module you need in very little time which costs pennies each to make. I can't imagine paying big bucks for them when you can build them for next to nothing quickly.

Lee, w0vt

----- Original Message -----

I'm not one to criticize someone for making a buck, but I made my own modules.
Some of the prices I have seen for a DIP header with a few 1N4148s soldered to
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-Jim
NU0C

On Tue, 16 Apr 2013 08:41:04 -0400 (EDT), Chgypsy@... wrote:

>Or you could build the modules (14 pin dips), each one of which would be
>for a different frequency range.
>Or you could purchase modules (most do). One source for the modules would
>be.
>
> http://www.marketworks.com/StoreFrontProfiles/default.aspx?sfid=86409
>
>A second source would be http://www.Radiolabworks.com , look under
>products.

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

[Non-text portions of this message have been removed]

13245. Re: [DrakeRadio] Aux-7 Board?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 04:56:27 UTC
From: Jim Shorney
Topic: 13237 Message: 13245

I didn't bother with covers on my DIP headers. The came off of surplus PCBs, and most didn't have them anyway. My work is neat enough that I WANT the next guy to see it. :) 1N4148s are common as dirt (and almost as cheap), and tend to be a little smaller than 914s I think. I Still have lots of them, also surplus, in a can of "stuff" given to me at a previous employer. The only cost was my time.

73

-Jim
NU0C

On Wed, 17 Apr 2013 00:36:02 -0400 (EDT), L L bahr wrote:

>Same here.Â I bought my TR-7 new with aux-7 board but made my own modules.Â They work perfect.Â All you have to do is get a bunch of IC headers.Â (They are the male plugs that plug into an IC socket.Â They are made to solder parts onto the back side.Â They cost a few cents each.Â You can use the cover over them or not use covers at all).Â The truth table tells you how to wire the needed 1N914 diodes for any given band segment.Â Of course the 1N914 diodes cost just a few cents two.Â In other words you can quickly make up any module you need in very little time which costs pennies each to make.Â I can't imagine paying big bucks for them when you can build them for next to nothing quickly.
>
>
>
>Lee, w0vt
>
>
>
>----- Original Message -----
>
>
>Â
>
>
>
>
>
>I'm not one to criticize someone for making a buck, but I made my own modules.
>Some of the prices I have seen for a DIP header with a few 1N4148s soldered to
>it seem a little high. Of course, it helped that I had DIP headers and diodes
>on hand, but the part are cheap.
>
>73
>
>-Jim

>NU0C
>
>On Tue, 16 Apr 2013 08:41:04 -0400 (EDT), Chgypsy@... wrote:
>
>>Or you could build the modules (14 pin dips), each one of which would be
>>for a different frequency range.
>>Or you could purchase modules (most do). One source for the modules would
>>be.
>>
>> http://www.marketworks.com/StoreFrontProfiles/default.aspx?sfid=86409
>>
>>A second source would be http://www.Radiolabworks.com , look under
>>products.
>
>--
>
>"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"
>
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13246. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 15:30:58 UTC
From: w7jpg
Topic: 2620 Message: 13246

Re: spackled finish.
IIRC, Glen, K9STH, published information on how he achieves a spackled finish on cabinets. You may wish to contact him directly...he comments on the Heath and Hallicrafters lists frequently. His contact info is also on his website.
http://k9sth.com/
Good luck,

Chris
W7JPG

--- In DrakeRadio@yahoogroups.com, <va3ag@...> wrote:
>
> Thanks Tim for the info I will use the same for my TR-4C. How did you do the spackled part?
>
> 73
>
> Aldo VA3AG
>

13247. Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 18:57:56 UTC
From: GALE STEWARD
Topic: 12900 Message: 13247

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 4, 2013 10:08 AM
Subject: Re: [DrakeRadio] Re: Frequency shift R to T in TR-4

Claude / Fred -

Good information!! That's considerably less than here, plus First
Class postage to send a 2 ounce Drake CD to EU now is almost $7.

Please let us know how the quality and accuracy comes out!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

claudewelsch wrote:
> Hello Fred,
>
> I ordered the crystal. It's £10, postage to France included.
>
> 73's
>
> Claude
> LX1EX
>
> --- In DrakeRadio@yahoogroups.com, "dodgy_dxer" <fredch@...> wrote:
>> Dear Claude
>>
>> Send an email to vincentvoy@... or call +44 208 393 0545
>>
>> He has a small ad in the RSGB magazine every month and also sells "standard" crystals on
eBay (like 10MHz etc) which I have bought from him
>>
>> He is in UK, near London and makes crystals to order at a lot less than $45. He knows
the Drake specs too.
>>
>> I also bought NEW Drake band crystals from him for the WARC bands for a 4 line at FAR
less than eBay sellers of years old used in the US!
>>
>> No import taxes on goods sent form UK to LUX either!
>>

>> 73 Fred
>> G4BWP - A65BD
>>
>> --- In DrakeRadio@yahoogroups.com, "claudewelsch" <clwelsch@> wrote:
>>
>>> I guess it's the crystal then. Does anybody know a good source for crystals. I asked Jan Crystals and one crystal costs me 45$ and 6 weeks time. I remember the good old time when crystals were available at every corner for 1$.
>>>
>>> Sorry for the mistake.
>>>
>>> Claude
>>> LX1EX
>>

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13248. Drake restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 20:23:52 UTC
From: John Sehring
Topic: 13248 Message: 13248

A ham friend of mine wants to have his Drake Twins station "restored".

I do all the work on my own gear, so don't have any suggestions for him.

List? Opinions?

tnx

--John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada

13249. Re: MEMBER NUMBER 1000 !!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 20:56:04 UTC
From: Dave AA7EE
Topic: 13094 Message: 13249

Garey - the 2B Service Supplement CD arrived on Monday (very swift service!)

Boy - what a lot of great information packed onto 1 CD. I've been looking on eBay for 2B's and already had to let one go, as I just can't justify the expenditure right now. I've been stocking up the parts bin lately for other projects and have to control myself sometimes. As far as 2B's go, I will want one in nice condition - particularly the copper-plated chassis and of course, those 2B's tend to command good prices.

I have even been tempted by an SW4-A in non-working condition as an ongoing project (as I like the SWBC bands too) but am not sure how much info there is out there about the SW-4A. I know it's not one of the best receivers out there from it's era, but I'm still curious.

So thank you Garey. I'll let you guys know when I finally become a Drake owner. It could be a while, but that Service Supplement CD is providing the extra motivation!

Dave
AA7EE

> Congratulations David! You have just become member 1000 of the
> DrakeRadio list on Yahoo Groups!

13250. Re: [DrakeRadio] Drake restoration

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-17 21:10:59 UTC
From: Garey Barrell
Topic: 13248 Message: 13250

John -

Two of the best are WA8SAJ and WB4HFN. There may be others out West,
but I don't know them.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
> A ham friend of mine wants to have his Drake Twins station "restored".
>
> I do all the work on my own gear, so don't have any suggestions for him.
>
> List? Opinions?
>
> tnx
>
> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
>
>

13251. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 14:39:56 UTC
From: Mark Gilger
Topic: 2620 Message: 13251

Aldo,
If you go to Ron's web page, at www.wb4hfn.com you will find an article on painting cabinets, including the spacking. Good luck and take your time when painting. It's much better to do it the correct way the first time than have to go back to step 1 and do it again.

73's,
Mark

13252. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 15:09:11 UTC
From: Chgypsy@...
Topic: 2620 Message: 13252

To the group,

mgilger@... writes:

If you go to Ron's web page, at www.wb4hfn.com you will find an
article on painting cabinets, including the spacking.
The information referred to is basically correct BUT the Krylon paint
numbers are no longer as they are different names and blends.
In addition the spackle method described will work, BUT NOT with the cans
that have the twistable nozzles for horizontal/ vertical spray patterns.
Carl WD8NHK

[Non-text portions of this message have been removed]

13253. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 15:21:12 UTC
From: va3ag
Topic: 2620 Message: 13253

--- In DrakeRadio@yahoogroups.com, Chgypsy@... wrote:
>
> To the group,
>
>
> mgilger@... writes:
>
> If you go to Ron's web page, at www.wb4hfn.com you will find an
> article on painting cabinets, including the spacking.
> The information referred to is basically correct BUT the Krylon paint
> numbers are no longer as they are different names and blends.
> In addition the spackle method described will work, BUT NOT with the cans
> that have the twistable nozzles for horizontal/ vertical spray patterns.
> Carl WD8NHK
>
> [Non-text portions of this message have been removed]
>
Thank you for all the info. I will be looking to see if I can find the paint up here. I the mean time I picked up another piece of Drake equipment to go with my TR-4C, it is coming from Quebec and I should have it here. It is a RV-4C which is in excellent shape, just one small scratch on the one side. anyway thanks again to all for your help.

73

Aldo VA3AG

13254. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 15:34:30 UTC
From: slowcountry1
Topic: 13108 Message: 13254

Garey,

Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.

I have found a number of areas that were mucked around in; I do not know what they were trying to accomplish and the mechanical connections were behind a number of problems. Some of the wiring I cleaned up as it just looked horrible, some I redid to repair questionable solder joints.

T7 and T9 had been removed at some point, for what reason I do not know; T7 looked like it had been rewound when I pulled the can off. As I had posted earlier, while trying to peak T9 top (20M section) the screw didn't feel right and I was not getting the S-Meter to peak properly. I removed it and found that the tuning slug was missing with a little piece of it broken, laying in the bottom of the tube. I removed T-9 from a TR-4c parts rig and installed it. When I attempted to peak T-9, I could only get 2 S units with the slug screw turned all the way in. I removed it again and pulled the can off both T-9 units that I had. The original can had a capacitor inside the can across the two pin side where the replacement did not. I took the good 20M tuning slug and installed it in T-9 that has the cap and had the missing slug and reinstalled. When I peak it now, I have 4 s-units with the slug screw all the way to the top however, the s-unit level never dips back off like the others do when you go past the sweet spot. 80 and 40 peak well over 30db over 9. It is at the top of its adjustment and very much seems like it need to be screwed out more. It seems as if the tuning slug is too long and needs a shorter one. What are your thoughts here? I also replaced T7 with the one out of the parts rig. All bands appear to peak as expected except for 20M.

Adjustment of injection couplers - I did not use the load as described in the alignment manual, I did the tuning without it as I did on my TR-4CW. All peak as expected however; T-1 will not peak to show any S-meter readings, I can peak it for a higher tone, but no s-meter readings.

Adjustment of balance modulator - When I short the PTT on the mic jack, I cannot develop any current above resting current; carrier balance or T-14 have no effect. The carrier balance pot does not have a stop point and does not look like the pot in my other rigs. This may have been replaced?

Transmit - R76 the resistor that goes through the chassis at T-14 had been replaced at some time. A bunch of wiring was apparently removed to get to it. I found several cold solder joints and the most important one from Pin 1 of V15 to C168. After making these repairs, I am able to tune 200 watts on 80, 40, 15 and 10M. 20M will only tune about 30 watts, I assume this is related to the T-9 problem? The tuning is very flaky though; with the XMTR gain fully counter clockwise, plate current is .5 to .6. I have to advance the XMTR gain to get the current to come down, then I can dip the plat and peak RF tune,then load up properly. The plate air variable and loading air variable are very touchy. Tuning is a bit erratic. I've looked closely several times and none of the plates are touching. In

addition, they do not move nearly as smooth as my other drakes; it almost like when the PTO bearings need greased.

The issues that need to be addressed, my assumption anyway;

1. Receive on 10M, 20M is very low. I get little to no s-meter reading and have to have the volume almost all the way up to hear a signal.

2. Loading up the transmitter is very erratic.

3. 20M will only produce little output power.

I have not attempted to transmit on the air yet. There have been horrible electrical storms in the area. I can transmit into a dummy load and monitor myself on another receiver. The audio sounds as good as I can tell it should. The plate meter moves with my voice as it does on my other rigs, and on 80 and 40M, my peak reading wattmeter deflects to about 200Watts. The S-meter does not deflect downward as it does on the other rigs like the AGC is not working though.

Your input is greatly appreciated. I apologize for the lengthy amount of text however; I felt the more information I could provide might help determine where to go next.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> What we needto dois check that signal from V4, should be about 6V p-p
> on the Plate. The coupling capacitors are C41 and C61, but I wouldn't
> recommend replacing them until we can look at the signal levels. No
> point in injecting another variable into the system. We should get
> about 150V p-p on the Plate of V6.
>
> Have you gonethrough the alignment procedure for T7 throughT10, using
> the separate receiver, to ensure that they DO resonate (tune for a
> peak) where they should? Try on more than one band.
>
> Also, I don't recall if you have done the 'tighten all the ground'
> hardware process. Go through and put a screwdriver on every screw that
> makes a ground connection, tube sockets, terminal strips, shields,
> etc. If tight, loosen a quarter turn and then tighten again.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:

> > Garey,
> >
> > I do not have either a probe or a working scope (couple of defunct military ones lol). I may be able to borrow one next week. I will check signals on other bands tomorrow. Any pointers on what capacitors may be at issue, I could check and or replace in the interim?
> >
> > Thanks for all your help!!!
> >
> > With all the help you dedicate to this list, when do you actually get time to operate your gear???
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> OK. Looks good. We're getting down to things like coupling
> >> capacitors. Do you have, or have access to a scope? An RF probe would
> >> do. We need some way to check and compare signal strengths.
> >>
> >> Pins 4 and 5 are the filament pins, so as long as one is 6.3 and one
> >> is ground, we're ok.
> >>
> >> From what we've found so far, all stages seem to be working, just not
> >> enough gain. Try tuning on 80 or 20, and see if you notice any
> >> difference. Peak RF TUNE, PLATEand LOAD controls on each band while
> >> listening in the receiver and confirm thatthey all 'tune' or peak when
> >> varied.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> V4
> >>>
> >>> 1. 160 2.0
> >>> 2. 0
> >>> 3. NC
> >>> 4. 6.35VAC
> >>> 5. tied to ground
> >>> 6. 0
> >>> 7. 226 230
> >>> 8. 161 148
> >>>
> >>> First number receive second number transmit
> >>>

> >>> The AC voltage on pin 4 is not supposed to be on this pin according to the TR-4 manual. It is supposed to be on pin 5 according to the manual. It does not appear to be tampered with.
> >>>
> >>> Regards,
> >>>
> >>> Doug N9XTF
> >>>
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> OK, DC levels look good. Check voltages on V4. This should eliminate
> >>>> any DC problems.
> >>>>
> >>>> V11 is in the receive IF, and V5 is the Calibrator, so no transmit effect.
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> Garey,
> >>>>>
> >>>>> Driver tube V6 voltages as follows;
> >>>>>
> >>>>> 1. 157 2.8
> >>>>> 2. 0
> >>>>> 3. Not connected
> >>>>> 4. 0
> >>>>> 5. 0
> >>>>> 6. 6.408 VAC
> >>>>> 7. 252 236
> >>>>> 8. 253 164
> >>>>>
> >>>>> First number receive second number transmit.
> >>>>>
> >>>>> Regards,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> Doug -
> >>>>>>
> >>>>>> OK, that's good. So we have a signal, we just have to amplify it and
> >>>>>> get it to the PA!
> >>>>>>
> >>>>>> Check the DC voltages on V6.
> >>>>>>

> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>> <www.k4oah.com>
> >>>>>>
> >>>>>> slowcountry1 wrote:
> >>>>>>> Garey,
> >>>>>>>
> >>>>>>> With the switch in CW-Tune and the sideband switch in the non-X position, I can adjust the bias to .1. When I set the switch to CW-Tune and the sideband switch to X together, I see .1 on the plate meter, no change. I can increase the xmtr gain and peak rf tune and there is no change is plate current and no output on the external wattmeter.
> >>>>>>>
> >>>>>>> I set my FT-847 to 6.996.420 CW Mode and the TR-4 to 7mhz dial on the 40 meter band switch. If I set the sideband to the non x position and the other switch to X-CW I hear a strong tone on the 847. If I also switch the sideband switch to X, the signal strength on the 847 increases. Peaking the rf tune in either mode produces a stronger signal on the 847.
> >>>>>>>
> >>>>>>> Regards,
> >>>>>>>
> >>>>>>> Doug N9XTF
> >>>>>>>
> >>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>> Doug -
> >>>>>>>>
> >>>>>>>> OK, I guess I missed that. Based on your measurements I calculate 96
> >>>>>>>> mA so that's pretty close! :-)
> >>>>>>>>
> >>>>>>>> So. Refresh the problem.
> >>>>>>>>
> >>>>>>>> If you switch to CW-TUNE, in the non -X position, you can adjust the
> >>>>>>>> BIAS correctly.
> >>>>>>>>
> >>>>>>>> If you switch to -X, key the transmitter (or unplug the key) do you
> >>>>>>>> see the idle current? If you increase the XMTR GAIN and peak the RF
> >>>>>>>> TUNE control do you get any increase in plate current? If you are on
> >>>>>>>> 40M, with the PTO set to 7000 do you hear a signal at 7.000 on a
> >>>>>>>> separate receiver? If you DO heara signal at 7.000 peak the RF TUNE
> >>>>>>>> for maximum signal onthe receiver.
> >>>>>>>>
> >>>>>>>> 73, Garey - K4OAH
> >>>>>>>> Glen Allen, VA
> >>>>>>>>
> >>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>> <www.k4oah.com>
> >>>>>>>>

> >>>>>>>> slowcountry1 wrote:
> >>>>>>>> Garey,
> >>>>>>>>
> >>>>>>>> I have not had any issue setting the bias to 100 ma on the plate meter or .1 When I switch to CW-tune and the other switch not in the X position, I can adjust the bias up and down without issue and then hit .1 as required by the manual. This is the first step I did when I started working on the receiver section.
> >>>>>>>>
> >>>>>>>> Thanks,
> >>>>>>>>
> >>>>>>>> Doug N9XTF
> >>>>>>>>
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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> >
>

13255. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 16:05:18 UTC
From: Paul Kraemer
Topic: 2620 Message: 13255

At last. Someone who agrees with my findings
I've been saying that for years and just get "corrected" like I didn't know what I was talking about.

Krylon 1613 was discontinued years ago. It appears to have been a more lacquer based product, very nice to work with, and a perfect match to Drake. I suspect it was discontinued because of changes in regulations affecting voc in paint.

Krylon 51613 that some say is same---is not---it is glossier and not even close in test panels I did.
Some places on the internet list 1613 on search, collect your money and ship 51613. They don't have a clue what happened. Krylon says it is a substitute. You end up with more cans of 51613 for free that are just like the ones you got at WalMart for half the internet price with no shipping. Hey, at least you get your money back and free paint.

The EZ touch spray nozzles do not respond same as old nozzles that could be drilled out to spatter. They tend to spray more uniform regardless of light touch. Try to drill them and you get paint drool not spatter.

What to do? I found just using the Krylon flat and buffing with soft cloth dampened in mineral spirits lets you come up on the desired degree of satin so you can emulate and old 2B (which is not spattered) and a recent 4 line product so you can make the new look like the rest of the gear on the table.

How to spatter with a spray can? Practice X 3! When it comes time to do the final deed on the cabinet I work on a large shhet of cardboard, get the spatter going about right and try to move over the product without changing the spray pressure either finger or the clamp on handle accessory.

Options? Invest in a low cost HVLP spray rig from Harbor freight and get paint mixed at someplace like Sherwin Williams that does industrial finishes. Or, if you are going to do every Drake you own and just want a nice matcing finish just take them out someplace, have them stripped, bead blasted, powder coated satin black and be done with it. We have access to a lovely satin black powder coat right here in the stix.

Paul K0UYA
----- Original Message -----
From: <Chgypsy@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:09 AM
Subject: Re: [DrakeRadio] Re: Drake paint

> To the group,
>

>
> mgilger@... writes:
>
> If you go to Ron's web page, at www.wb4hfn.com you will find an
> article on painting cabinets, including the spacking.
> The information referred to is basically correct BUT the Krylon paint
> numbers are no longer as they are different names and blends.
> In addition the spackle method described will work, BUT NOT with the
> cans
> that have the twistable nozzles for horizontal/ vertical spray patterns.
> Carl WD8NHK
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

13256. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 16:29:34 UTC
From: Garey Barrell
Topic: 13108 Message: 13256

Doug-

OK, progress is good! That's something that I tend to take for granted, and I shouldn't. The first two steps should be to go through checking all the hardware for tightness, and as you go, inspect for changes, bad solder broken pieces, or anything else that doesn't 'look right'. "I" do that automatically and need to encourage others to do the same.

Anyway!!

Typically, either it was being, or attempting to be modified for CB service.

1. The coils and transformers are designed to operate as a resonant circuit. I would select the T9 that looks 'original', and change the internal capacitor for one that allows the slug to peak near the center of it's range. I don't remember what kind of cap Drake used, but it needs to be either a mica or NP0 ceramic. If itadjusts to maxwith the slug all the way out, the capacitor needs to be a bit bigger.

It's best to use the alignment load to ensure that the proper bandwidth is achieved. Several iterations of the adjustmentscan approach the correct tuning.

3. It's been a while since I've worked on a TR-4, but I believe thatT1 is very broad tuning, especially without the alignment load. Since it uses the Calibrator signal, I'd suggest trying another harmonic as there can be quite a difference between alternate harmonics.

The newer models of the T-4X and TR-4's do not have enough out of the Balanced Modulator 'at its worst' to increase above idle current. Easiest is to connect an external receiverto a loop consisting of a few turns of insulated wire and place it near the PA under the chassis. Tune in the 9 MHz Carrier Oscillator, peak T14 and then adjust Carrier Balance for minimum signal. You should be able to get it down into the noise of the receiver.

2. This sounds like instability in the PA. Check the grounding of the TUNE and LOAD controls. Clean and DeoxIT the grounding springs on each end of the capacitor shafts. If hardened grease in the bearings, clean it out and replace with Lubriplate or other light grease. Check the neutralization of the PA. 15M would be a good place to start, carefully dip the PLATE control for minimum plate current, and note output on external power meter. Then turn the PLATE control in either direction 'out of resonance' while watching the output power. IF the output power goes UP when the PLATE control is turned either way out

of resonance, the PAis not properly neutralized. If it's close, you
can try adjusting the neutralization capin the PA (C76) just a few
degrees one way or the other, and recheck. If the power goes UP
'more' adjust C76 a few degrees back and then a few MORE degrees and
recheck. This can be a frustrating operation, and if you find you
can't hit it, remove the DC from the Plate and Screen terminals on the
outer side of the underchassis shield. Then listen to the ANT output
of the TR-4 with your external receiver and adjust C76 for the dip.
Becareful with the terminals onthe PA shield, especially the Screen,
as the ceramic caps WILL crack or break if too much stress is applied.

Sounds like you're getting close!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
>
> I have found a number of areas that were mucked around in; I do not know what they were trying to accomplish and the mechanical connections were behind a number of problems. Some of the wiring I cleaned up as it just looked horrible, some I redid to repair questionable solder joints.
>
> T7 and T9 had been removed at some point, for what reason I do not know; T7 looked like it had been rewound when I pulled the can off. As I had posted earlier, while trying to peak T9 top (20M section) the screw didn't feel right and I was not getting the S-Meter to peak properly. I removed it and found that the tuning slug was missing with a little piece of it broken, laying in the bottom of the tube. I removed T-9 from a TR-4c parts rig and installed it. When I attempted to peak T-9, I could only get 2 S units with the slug screw turned all the way in. I removed it again and pulled the can off both T-9 units that I had. The original can had a capacitor inside the can across the two pin side where the replacement did not. I took the good 20M tuning slug and installed it in T-9 that has the cap and had the missing slug and reinstalled. When I peak it now, I have 4 s-units with the slug screw all the way to the top however, the s-unit level never dips back off like the others do when you go past the sweet spot. 80 and 40 peak well over 30db over 9. It is at the top of its adjustment and very much seems like it need to be screwed out more. It seems as if the tuning slug is too long and needs a shorter one. What are your thoughts here? I also replaced T7 with the one out of the parts rig. All bands appear to peak as expected except for 20M.
>
> Adjustment of injection couplers - I did not use the load as described in the alignment manual, I did the tuning without it as I did on my TR-4CW. All peak as expected however; T-1 will not peak to show any S-meter readings, I can peak it for a higher tone, but no

s-meter readings.
>
> Adjustment of balance modulator - When I short the PTT on the mic jack, I cannot develop any current above resting current; carrier balance or T-14 have no effect. The carrier balance pot does not have a stop point and does not look like the pot in my other rigs. This may have been replaced?
>
> Transmit - R76 the resistor that goes through the chassis at T-14 had been replaced at some time. A bunch of wiring was apparently removed to get to it. I found several cold solder joints and the most important one from Pin 1 of V15 to C168. After making these repairs, I am able to tune 200 watts on 80, 40, 15 and 10M. 20M will only tune about 30 watts, I assume this is related to the T-9 problem? The tuning is very flaky though; with the XMTR gain fully counter clockwise, plate current is .5 to .6. I have to advance the XMTR gain to get the current to come down, then I can dip the plat and peak RF tune,then load up properly. The plate air variable and loading air variable are very touchy. Tuning is a bit erratic. I've looked closely several times and none of the plates are touching. In addition, they do not move nearly as smooth as my other drakes; it almost like when the PTO bearings need greased.
>
> The issues that need to be addressed, my assumption anyway;
>
> 1. Receive on 10M, 20M is very low. I get little to no s-meter reading and have to have the volume almost all the way up to hear a signal.
>
> 2. Loading up the transmitter is very erratic.
>
> 3. 20M will only produce little output power.
>
> I have not attempted to transmit on the air yet. There have been horrible electrical storms in the area. I can transmit into a dummy load and monitor myself on another receiver. The audio sounds as good as I can tell it should. The plate meter moves with my voice as it does on my other rigs, and on 80 and 40M, my peak reading wattmeter deflects to about 200Watts. The S-meter does not deflect downward as it does on the other rigs like the AGC is not working though.
>
> Your input is greatly appreciated. I apologize for the lengthy amount of text however; I felt the more information I could provide might help determine where to go next.
>
> Regards,
>
> Doug N9XTF
>
>

13257. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 16:31:08 UTC
From: Paul Christensen
Topic: 2620 Message: 13257

Been reading a similar issue on the Corvette forums. Owners there say that the original Krylon 1613 formulation is available only through industrial suppliers like MSC Industrial. According to them, the correct can has the old square top cap and not the newer rounded bullet style. The can will also state "Not for Retail Sale." I just ordered a can. If it's the right one, great. If not, it will be used for some other household application.

Paul, W9AC

----- Original Message -----
From: Paul Kraemer
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 18, 2013 12:05 PM
Subject: Re: [DrakeRadio] Re: Drake paint

At last. Someone who agrees with my findings
I've been saying that for years and just get "corrected" like I didn't know what I was talking about.

Krylon 1613 was discontinued years ago. It appears to have been a more lacquer based product, very nice to work with, and a perfect match to Drake. I suspect it was discontinued because of changes in regulations affecting voc in paint.

Krylon 51613 that some say is same---is not---it is glossier and not even close in test panels I did.
Some places on the internet list 1613 on search, collect your money and ship 51613. They don't have a clue what happened. Krylon says it is a substitute. You end up with more cans of 51613 for free that are just like the ones you got at WalMart for half the internet price with no shipping. Hey, at least you get your money back and free paint.

The EZ touch spray nozzles do not respond same as old nozzles that could be drilled out to spatter. They tend to spray more uniform regardless of light touch. Try to drill them and you get paint drool not spatter.

What to do? I found just using the Krylon flat and buffing with soft cloth dampened in mineral spirits lets you come up on the desired degree of satin so you can emulate and old 2B (which is not spattered) and a recent 4 line product so you can make the new look like the rest of the gear on the table.

How to spatter with a spray can? Practice X 3! When it comes time to do the final deed on the cabinet I work on a large shhet of cardboard, get the spatter going about right and try to move over the product without changing the spray pressure either finger or the clamp on handle accessory.

Options? Invest in a low cost HVLP spray rig from Harbor freight and get paint mixed at someplace like Sherwin Williams that does industrial

finishes. Or, if you are going to do every Drake you own and just want a nice matcing finish just take them out someplace, have them stripped, bead blasted, powder coated satin black and be done with it. We have access to a lovely satin black powder coat right here in the stix.

Paul K0UYA
----- Original Message -----
From: <Chgypsy@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:09 AM
Subject: Re: [DrakeRadio] Re: Drake paint

> To the group,
>
>
> mgilger@... writes:
>
> If you go to Ron's web page, at www.wb4hfn.com you will find an
> article on painting cabinets, including the spacking.
> The information referred to is basically correct BUT the Krylon paint
> numbers are no longer as they are different names and blends.
> In addition the spackle method described will work, BUT NOT with the
> cans
> that have the twistable nozzles for horizontal/ vertical spray patterns.
> Carl WD8NHK
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13258. Re: [DrakeRadio] Re: TR-4 Repair (Added)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 16:32:08 UTC
From: Garey Barrell
Topic: 13108 Message: 13258

Doug -

One other thing. Compare your repaired areas with the photos inthe
CD. Some of the wiring, especially in the PA and CO area is
critical. This is the best way to make sure everything is back where
it should be!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Here is the work that I have done this week and their results. I have a number of
questions that will be included in the text.
>

13259. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 16:41:06 UTC
From: Paul Kraemer
Topic: 2620 Message: 13259

That would be great.
When I called SWP makers of Krylon they told me no longer available.
I ordered some from one of the internet stores that showed the old can and old number and received 51613 and when I called back I got a bunch of "I dunno I just sit here at my computer and do what it tells me on the screen".
Got a refund and told to keep the paint. They wouldn't pay the shipping to get it back.
Also FWIW---1613 does not mix and play well with other finishes. I had a can left and tried to go back the other way. Had to strip everything to bare metal and start all over.
I think it is government regulations at work to save the state of CA.
Paul
----- Original Message -----
From: "Paul Christensen" <w9ac@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 11:31 AM
Subject: Re: [DrakeRadio] Re: Drake paint

> Been reading a similar issue on the Corvette forums. Owners there say
> that the original Krylon 1613 formulation is available only through
> industrial suppliers like MSC Industrial. According to them, the correct
> can has the old square top cap and not the newer rounded bullet style.
> The can will also state "Not for Retail Sale." I just ordered a can. If
> it's the right one, great. If not, it will be used for some other
> household application.
>
> Paul, W9AC
>
>
> ----- Original Message -----
> From: Paul Kraemer
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, April 18, 2013 12:05 PM
> Subject: Re: [DrakeRadio] Re: Drake paint
>
>
>
>
> At last. Someone who agrees with my findings
> I've been saying that for years and just get "corrected" like I didn't
> know
> what I was talking about.
>
> Krylon 1613 was discontinued years ago. It appears to have been a more
> lacquer based product, very nice to work with, and a perfect match to
> Drake.

> I suspect it was discontinued because of changes in regulations affecting
> voc in paint.
>
> Krylon 51613 that some say is same---is not---it is glossier and not even
> close in test panels I did.
> Some places on the internet list 1613 on search, collect your money and
> ship
> 51613. They don't have a clue what happened. Krylon says it is a
> substitute.
> You end up with more cans of 51613 for free that are just like the ones
> you
> got at WalMart for half the internet price with no shipping. Hey, at
> least
> you get your money back and free paint.
>
> The EZ touch spray nozzles do not respond same as old nozzles that could
> be
> drilled out to spatter. They tend to spray more uniform regardless of
> light
> touch. Try to drill them and you get paint drool not spatter.
>
> What to do? I found just using the Krylon flat and buffing with soft
> cloth
> dampened in mineral spirits lets you come up on the desired degree of
> satin
> so you can emulate and old 2B (which is not spattered) and a recent 4
> line
> product so you can make the new look like the rest of the gear on the
> table.
>
> How to spatter with a spray can? Practice X 3! When it comes time to do
> the
> final deed on the cabinet I work on a large shhet of cardboard, get the
> spatter going about right and try to move over the product without
> changing
> the spray pressure either finger or the clamp on handle accessory.
>
> Options? Invest in a low cost HVLP spray rig from Harbor freight and get
> paint mixed at someplace like Sherwin Williams that does industrial
> finishes. Or, if you are going to do every Drake you own and just want a
> nice matcing finish just take them out someplace, have them stripped,
> bead
> blasted, powder coated satin black and be done with it. We have access to
> a
> lovely satin black powder coat right here in the stix.
>
> Paul K0UYA
> ----- Original Message -----
> From: <Chgypsy@...>
> To: <DrakeRadio@yahoogroups.com>

> Sent: Thursday, April 18, 2013 10:09 AM
> Subject: Re: [DrakeRadio] Re: Drake paint
>
> > To the group,
> >
> >
> > mgilger@... writes:
> >
> > If you go to Ron's web page, at www.wb4hfn.com you will find an
> > article on painting cabinets, including the spacking.
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> > In addition the spackle method described will work, BUT NOT with the
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> patterns.
> > Carl WD8NHK
> >
> > [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13260. RE: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 17:33:39 UTC
From: Terrell Hamilton
Topic: 2620 Message: 13260

Paul -

I think you're right - I keep a similar product warning label on my bulletin board - It states: "PROPOSITION 65 WARNING This product contains elements that if ingested may cause cancer in the state of California." (apologies to all you Native Sons out there...)

Terry K7WLD

Wenatchee, WA

>...Also FWIW---1613 does not mix and play well with other finishes. I had a

>can left and tried to go back the other way. Had to strip everything to
>bare metal and start all over.
>I think it is government regulations at work to save the state of CA.
>Paul

[Non-text portions of this message have been removed]

13261. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 17:40:49 UTC
From: amfone
Topic: 2620 Message: 13261

Paul is correct about the Krylon Paint. I looked at the local hardware for 1613 but could not find it in the can I purchased color 51613. I was looking for flat black and this is a satin black. That is all they had however so going on getting the job done I purchased the 51613 can. Looking on the internet at the hardware store we could not find 1613 as well.

Now that being said I recently painted a 2B cabinet. Following what Paul stated about not being close in color I held up a T4XC I have here(I have lots of Drake gear) to the painted 2B and can tell you it is difficult for me to tell the difference, for me it is that close. I would say the new paint may have a bit more satin tone but side by side, at least in the lite I have in the shack they are very close, I would not say the same but so close that for me after looking at the two side by side and holding one next to the other it is close at least.

Anyway that is my story.

73 Tim
WB8UHZ

From: Paul Kraemer <elespe@...>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 18, 2013 12:05 PM
Subject: Re: [DrakeRadio] Re: Drake paint

At last. Someone who agrees with my findings
I've been saying that for years and just get "corrected" like I didn't know what I was talking about.

Krylon 1613 was discontinued years ago. It appears to have been a more lacquer based product, very nice to work with, and a perfect match to Drake. I suspect it was discontinued because of changes in regulations affecting voc in paint.

Krylon 51613 that some say is same---is not---it is glossier and not even close in test panels I did.
Some places on the internet list 1613 on search, collect your money and ship 51613. They don't have a clue what happened. Krylon says it is a substitute. You end up with more cans of 51613 for free that are just like the ones you got at WalMart for half the internet price with no shipping. Hey, at least you get your money back and free paint.

The EZ touch spray nozzles do not respond same as old nozzles that could be drilled out to spatter. They tend to spray more uniform regardless of light touch. Try to drill them and you get paint drool not spatter.

What to do? I found just using the Krylon flat and buffing with soft cloth dampened in mineral spirits lets you come up on the desired degree of satin

so you can emulate and old 2B (which is not spattered) and a recent 4 line product so you can make the new look like the rest of the gear on the table.

How to spatter with a spray can? Practice X 3! When it comes time to do the final deed on the cabinet I work on a large shhet of cardboard, get the spatter going about right and try to move over the product without changing the spray pressure either finger or the clamp on handle accessory.

Options? Invest in a low cost HVLP spray rig from Harbor freight and get paint mixed at someplace like Sherwin Williams that does industrial finishes. Or, if you are going to do every Drake you own and just want a nice matcing finish just take them out someplace, have them stripped, bead blasted, powder coated satin black and be done with it. We have access to a lovely satin black powder coat right here in the stix.

Paul K0UYA
----- Original Message -----
From: <Chgypsy@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:09 AM
Subject: Re: [DrakeRadio] Re: Drake paint

> To the group,
>
>
> mgilger@... writes:
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> If you go to Ron's web page, at www.wb4hfn.com you will find an
> article on painting cabinets, including the spacking.
> The information referred to is basically correct BUT the Krylon paint
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13262. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 18:08:54 UTC
From: Steve Wedge
Topic: 2620 Message: 13262

But only in the state of California. In NC, it will put hair on your chest!

Couldn't resist.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terrell Hamilton
Sent: Thursday, April 18, 2013 1:33 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Re: Drake paint

Paul -

I think you're right - I keep a similar product warning
label on my bulletin board - It states: "PROPOSITION 65 WARNING This
product contains elements that if ingested may cause cancer in the state of
California." (apologies to all you Native Sons out there...)

Terry K7WLD

Wenatchee, WA

>...Also FWIW---1613 does not mix and play well with other finishes. I had a

>can left and tried to go back the other way. Had to strip everything to
>bare metal and start all over.
>I think it is government regulations at work to save the state of CA.
>Paul

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13263. RE: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 19:05:33 UTC
From: Terrell Hamilton
Topic: 2620 Message: 13263

Steve -

You NC guys are Hoo-Ah-h-h-h!!!!!!!!!

Terry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Steve Wedge
Sent: Thursday, April 18, 2013 11:09 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Drake paint

But only in the state of California. In NC, it will put hair on your chest!

Couldn't resist.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Terrell Hamilton
Sent: Thursday, April 18, 2013 1:33 PM
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Subject: RE: [DrakeRadio] Re: Drake paint

Paul -

I think you're right - I keep a similar product warning label on my bulletin board - It states: "PROPOSITION 65 WARNING This product contains elements that if ingested may cause cancer in the state of California." (apologies to all you Native Sons out there...)

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>can left and tried to go back the other way. Had to strip everything to
>bare metal and start all over.
>I think it is government regulations at work to save the state of CA.
>Paul

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13264. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 19:26:50 UTC
From: Paul Kraemer
Topic: 2620 Message: 13264

Apologies to the good folks of the great state of CA but every warning on
paint to nasty habit items is worried about cancer in CA.
But they have those stores, grow-ops I think they are called?
Medicinal purposes only.
Paul K0UYA

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 12:33 PM
Subject: RE: [DrakeRadio] Re: Drake paint

> Paul -
>
>
>
> I think you're right - I keep a similar product warning
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>>Paul
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> [Non-text portions of this message have been removed]
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13265. Re: TR-4 Repair (Added)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 21:13:09 UTC
From: slowcountry1
Topic: 13108 Message: 13265

Garey,

I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.

On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.

I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?

It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.

In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.

Regards,

Doug N9XTF
--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> One other thing. Compare your repaired areas with the photos inthe
> CD. Some of the wiring, especially in the PA and CO area is
> critical. This is the best way to make sure everything is back where
> it should be!
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> slowcountry1 wrote:
> > Garey,
> >
> > Here is the work that I have done this week and their results. I have a number of
questions that will be included in the text.
> >

>

13266. Re: [DrakeRadio] Re: TR-4 Repair (Added)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-18 21:31:53 UTC
From: Garey Barrell
Topic: 13108 Message: 13266

Doug -

It is not unusual for there to be caps and resistors inside transformers. I suppose if it's not marked it may be a bypass or no telling. I suspect what has happened is that someone tried to move it to CB and failed, and then either that person or someone else has tried to return it to stock.

You can certainly mount the cap on the terminals on the outside of the transformer. There may be some coupling problems, but I doubt it. Certainly worth trying until you find the right one. Sometimes these caps are selected to account for variations in coil windings, plus ferrites were not nearly as consistent from batch to batch as they are today. Once you find a suitable value, I'd move it inside the can just to be safe. Be sure and use stable capacitors such as silver mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's of pFs, but I could be wrong. If you are able to measure the existing cap it would give you a starting point.

It's certainly possible that a model had a different layout, although I've not seen any significant variations. If you look in the 'Versions' directory, there are a couple of Drake photos of different models that may help determine if something is abnormal.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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slowcountry1 wrote:
> Garey,
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> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
>
> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
>
> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
>

> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
>
> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
>
> Regards,
>
> Doug N9XTF
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> One other thing. Compare your repaired areas with the photos inthe
>> CD. Some of the wiring, especially in the PA and CO area is
>> critical. This is the best way to make sure everything is back where
>> it should be!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
>>>

13267. Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 00:53:16 UTC
From: Mark Gilger
Topic: 2620 Message: 13267

The article on Ron's web page is correct and has the correct Krylon paint number. I'm surprised no one has even been there to check.

http://wb4hfn.com/DRAKE/DrakeArticles/TechTips/CabinetRepainting.htm

Also, someone had also mentioned the spackling will not work with the new heads. That's not correct. It works as well as it did with the previous paint, maybe better. I've painted dozens and dozens of cabinets using the newer paint and every one has been spackled the same. So I would be interested in knowing what difficulty there was spackling using the new head?

Regards,
Mark

13268. Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 02:32:52 UTC
From: zl1bbw
Topic: 13224 Message: 13268

Well I am now the produ (I hope) owner of a TR4 RV4 AC4 and a shure 444mic for the total of $250NZ that is $207 US, plus I have to get it here, that will take a bit of ham intervention I hope to get it closer then I can go and pick it up.

I am fortunate at the moment having 15 acres of flat land, and just coming to 65 so easing off a little bit, that the time for hamming is back in my life.

i hope the TR4 looks good alongisde the B & C line, have got a 75A4 that I have owned for 50 years that needs recapping a new dial sticky on it.

But I see these people spending 6 or 7k on a rig in a el cheapo vertical, and I do wonder what is the big idea.

Regards to all

Oh just built my Winkeyer and got that working so life is looking up :-)

--- In DrakeRadio@yahoogroups.com, John Sehring <wb0eq@...> wrote:
>
> I could not agree more with you!
>
> Absolutely the best place to spend $$ is on the antenna. This fact is hardly on the mind of most. They think they need megabuck radios--not!
>
> A friend just put Drake Twins on the air. His comment, funny thing, these radios hear just as good as my IcYeasWood expensive radio.
>
> Yes, within its limitations, the R-4B is just fine, IMO. Of course, less so in contests. I find a good external DSP-driven audio filter is very useful on these radios. I use the Timewave 59+, are now pretty cheap used.
>
> And you can fix the radio yourself.

>
> Basically, I don't want anything in my shack that I cannot repair!
>
> Too bad about slim ham population. Yes, no QRM but lonely, no? I've lived in the most sparsely populated places in North America. We had 3 hams in whole county, size = 100 mi. x 100 mi. One moved away, one SK'd, well...
>
>
> >A friend in the UK keeps on at me to buy some new gear, but it is so expensive in NZ its unreal and no back up service of any value, >so why should I get a FT1000 or better at 10 times the price and zero times the repairability. Reckon the best place to spend money is up in air on antennas. Will see if I can catch this one, and report back.
>
> >A good Datong audio filter sorts out many of the audio issues.

>
> >Also not a great Ham population up here, think I am the only one on HF within 30 or 40 miles, so no nearby problems.
>
>
> --John Sehring WB0EQ-VE6EQR   nr Calgary, Alberta, Canada
>

13269. Re: [DrakeRadio] Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 02:57:06 UTC
From: Don Cunningham
Topic: 13224 Message: 13269

Gavin,

The TR4/RV4 will look great alongside the B and C lines as well as the 75A4. Let us know when you are on the air and hearing U.S. stations, and I for one will fire up some Drakes and give a shout!!!!! I have both the B & C lines, and a TR4C, all of which will drive the L4B and with the 4 element Cubex, SHOULD make it to New Zealand, hi. Great fun and glad you got the rigs.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6254 - Release Date: 04/18/13

[Non-text portions of this message have been removed]

13270. Re: [DrakeRadio] Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 03:12:50 UTC
From: William Houghton
Topic: 13224 Message: 13270

Sounds like you stole it for US $207 - hihi!

From: zl1bbw <calf4u@...>
To: DrakeRadio@yahoogroups.com
Sent: Thu, April 18, 2013 7:32:59 PM
Subject: [DrakeRadio] Re: TR-4 to buy or not

Well I am now the produ (I hope) owner of a TR4 RV4 AC4 and a shure 444mic for the total of $250NZ that is $207 US, plus I have to get it here, that will take a bit of ham intervention I hope to get it closer then I can go and pick it up.

I am fortunate at the moment having 15 acres of flat land, and just coming to 65 so easing off a little bit, that the time for hamming is back in my life.

i hope the TR4 looks good alongisde the B & C line, have got a 75A4 that I have owned for 50 years that needs recapping a new dial sticky on it.

But I see these people spending 6 or 7k on a rig in a el cheapo vertical, and I do wonder what is the big idea.

Regards to all

Oh just built my Winkeyer and got that working so life is looking up :-)

--- In DrakeRadio@yahoogroups.com, John Sehring <wb0eq@...> wrote:
>
> I could not agree more with you!
>
> Absolutely the best place to spend $$ is on the antenna. This fact is hardly
>on the mind of most. They think they need megabuck radios--not!
>
> A friend just put Drake Twins on the air. His comment, funny thing, these
>radios hear just as good as my IcYeasWood expensive radio.
>
> Yes, within its limitations, the R-4B is just fine, IMO. Of course, less so in
>contests. I find a good external DSP-driven audio filter is very useful on
>these radios. I use the Timewave 59+, are now pretty cheap used.
>
> And you can fix the radio yourself.

>
> Basically, I don't want anything in my shack that I cannot repair!
>
> Too bad about slim ham population. Yes, no QRM but lonely, no? I've lived in
>the most sparsely populated places in North America. We had 3 hams in whole
>county, size = 100 mi. x 100 mi. One moved away, one SK'd, well...

>
>
> >A friend in the UK keeps on at me to buy some new gear, but it is so expensive
>in NZ its unreal and no back up service of any value, >so why should I get a
>FT1000 or better at 10 times the price and zero times the repairability. Reckon
>the best place to spend money is up in air on antennas. Will see if I can catch
>this one, and report back.
>
> >A good Datong audio filter sorts out many of the audio issues.
>
> >Also not a great Ham population up here, think I am the only one on HF within
>30 or 40 miles, so no nearby problems.
>
>
> --John Sehring WB0EQ-VE6EQR   nr Calgary, Alberta, Canada
>

[Non-text portions of this message have been removed]

13271. Re: [DrakeRadio] Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 03:23:13 UTC
From: Dan Galligan
Topic: 13224 Message: 13271

Yep, I paid far more than that, for a TR4, with issues. GREAT DEAL!!

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 18, 2013, at 20:12, William Houghton <rdrbill@...> wrote:

> Sounds like you stole it for US $207 - hihi!
>
>
>
>
> _____
> From: zl1bbw <calf4u@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thu, April 18, 2013 7:32:59 PM
> Subject: [DrakeRadio] Re: TR-4 to buy or not
>
>
> Well I am now the produ (I hope) owner of a TR4 RV4 AC4 and a shure 444mic for
> the total of $250NZ that is $207 US, plus I have to get it here, that will take
> a bit of ham intervention I hope to get it closer then I can go and pick it up.
>
> I am fortunate at the moment having 15 acres of flat land, and just coming to 65
> so easing off a little bit, that the time for hamming is back in my life.
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> i hope the TR4 looks good alongisde the B & C line, have got a 75A4 that I have
> owned for 50 years that needs recapping a new dial sticky on it.
>
> But I see these people spending 6 or 7k on a rig in a el cheapo vertical, and I
> do wonder what is the big idea.
>
> Regards to all
>
> Oh just built my Winkeyer and got that working so life is looking up :-)
>
> --- In DrakeRadio@yahoogroups.com, John Sehring <wb0eq@...> wrote:

>>
>> I could not agree more with you!
>>
>> Absolutely the best place to spend $$ is on the antenna. This fact is hardly
>> on the mind of most. They think they need megabuck radios--not!
>>
>> A friend just put Drake Twins on the air. His comment, funny thing, these
>> radios hear just as good as my IcYeasWood expensive radio.
>>
>> Yes, within its limitations, the R-4B is just fine, IMO. Of course, less so in
>> contests. I find a good external DSP-driven audio filter is very useful on
>> these radios. I use the Timewave 59+, are now pretty cheap used.
>>
>> And you can fix the radio yourself.
>
>>
>> Basically, I don't want anything in my shack that I cannot repair!
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>> Too bad about slim ham population. Yes, no QRM but lonely, no? I've lived in
>> the most sparsely populated places in North America. We had 3 hams in whole
>> county, size = 100 mi. x 100 mi. One moved away, one SK'd, well...
>>
>>
>>> A friend in the UK keeps on at me to buy some new gear, but it is so expensive
>> in NZ its unreal and no back up service of any value, >so why should I get a
>> FT1000 or better at 10 times the price and zero times the repairability. Reckon
>> the best place to spend money is up in air on antennas. Will see if I can catch
>> this one, and report back.
>>
>>> A good Datong audio filter sorts out many of the audio issues.
>>
>>> Also not a great Ham population up here, think I am the only one on HF within
>> 30 or 40 miles, so no nearby problems.
>>
>>
>> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13272. Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 06:19:54 UTC
From: zl1bbw
Topic: 13224 Message: 13272

w2hat do you reckon about the 4 ele cubex, am thinking of getting one soon?
--- In DrakeRadio@yahoogroups.com, "Don Cunningham" <donc@...> wrote:
>
> Gavin,
>
> The TR4/RV4 will look great alongside the B and C lines as well as the 75A4. Let us know when you are on the air and hearing U.S. stations, and I for one will fire up some Drakes and give a shout!!!!! I have both the B & C lines, and a TR4C, all of which will drive the L4B and with the 4 element Cubex, SHOULD make it to New Zealand, hi. Great fun and glad you got the rigs.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3272 / Virus Database: 3162/6254 - Release Date: 04/18/13
>
>
> [Non-text portions of this message have been removed]
>

13273. SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 11:52:32 UTC
From: taner@btinternet.com
Topic: 13004 Message: 13273

Trying to repair the unit but I just discovered that there is a audio type transformer fitted which is not on SPR-4 diagram.
Done some search and it seems that a TA4? was fitted sometime in the past.
So that the receiver can be linked to a transmitter.
Looking at the circuit diagram of TA4 and the installation notes (found on the net)I can not work out what this add-on does exactly.

Does the receiver bypasses its PTO and/or the Xtal Oscilators ?.

In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?

Thanks,

> That lead is NOT connected where it crosses the Emitter lead of Q19.
> That's why it doesn't make sense! :-)
>
> Back in the olde days, wires crossing like that would have a "U" shape
> to show the crossover, but that was too much trouble to draw, so they
> started putting a big 'DOT' where it was a connection (like the one
> just below the one in question). This was 'ok' for the original
> drawing, but by the time it's photocopied a couple of (dozen) times
> the crossover isn't all that clear.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> JT wrote:
> > Hi all,
> >
> > Recently got my first Drake which is a SPR-4 from a second hand shop.
> >
> > The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
> >
> > I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
> >
> > But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.
> >
> > Could someone please explain the working of this circuit.

> >
> > Thanks,
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
> >
>

13274. SPR-4 and TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 12:37:22 UTC
From: taner@btinternet.com
Topic: 13274 Message: 13274

Trying to repair the unit but I just discovered that there is a audio type transformer fitted which is not on SPR-4 diagram.
Done some search and it seems that a TA4? was fitted sometime in the past.
So that the receiver can be linked to a transmitter.
Looking at the circuit diagram of TA4 and the installation notes (found on the net)I can not work out what this add-on does exactly.

Does the receiver bypasses its PTO and/or the Xtal Oscilators ?.

In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?

Thanks,

> That lead is NOT connected where it crosses the Emitter lead of Q19.
> That's why it doesn't make sense! :-)
>
> Back in the olde days, wires crossing like that would have a "U" shape
> to show the crossover, but that was too much trouble to draw, so they
> started putting a big 'DOT' where it was a connection (like the one
> just below the one in question). This was 'ok' for the original
> drawing, but by the time it's photocopied a couple of (dozen) times
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>

13275. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 12:48:43 UTC
From: Chgypsy@...
Topic: 2620 Message: 13275

mgilger@... writes:

The article on Ron's web page is correct and has the correct Krylon paint number. I'm surprised no one has even been there to check.

The original article had the old number "semi flat", and if you got used to using that the new shade of 51613 is different. Frankly old eyes will probably not spot enough difference unless you put under a fluorescent side by side original to repaint, not talking about spackle.
Yes I had problems with the "swivel" nozzle, it dribbled badly. Carl wd8nhk

[Non-text portions of this message have been removed]

13276. Re: [DrakeRadio] SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 14:15:49 UTC
From: Garey Barrell
Topic: 13004 Message: 13276

JT -

Hard to say what the transformer might be for without knowing where it's connected.

I can explain the TA-4 operation, and make a guess what the transformer MIGHT have been for.

The Drake 'Twins' enabled transceive operation with either R or T PTO (VFO) controlling both units, or each controlling its own. A brief description of the twins circuit topology is that the PTO (~5 - 5.5 MHz) is 'Premixed' with the BAND oscillator (18.1 MHz for 40M), resulting in an LO for the 1st Mixer of ~13 MHz. This signal is then mixed with the 7 MHz incoming signal, resulting in the 1st IF of 5.645 MHz. The transmitter uses a similar scheme, except the ~13 MHz Premixer signal is mixed with the 5.645 MHz Carrier Oscillator to produce the 7 MHz output signal.

For transceive control of the pair from the Receiver, the Premixer in the transmitter is disabled by a switch contact, and the Premixer signal from the receiver via the INJ cable is applied to the 1st Mixer in the transmitter. When control of both by the transmitter is desired, a negative voltage of about -30 VDC to disable the receiver Premixer stage is sent via the INJ cable, along with the transmitter Premixer signal.

What the TA-4 accessory does is emulate these functions by various semiconductor switches. The transformer you have is 'probably' a voltage step-up from the 4 ohm audio output of the SPR-4 (picked up at the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX signal to the T-4X.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

taner@... wrote:
>
> Trying to repair the unit but I just discovered that there is a audio type transformer fitted which is not on SPR-4 diagram.
> Done some search and it seems that a TA4? was fitted sometime in the past.
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>
> In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?
>
> Thanks,
>
>
>
>
>> That lead is NOT connected where it crosses the Emitter lead of Q19.
>> That's why it doesn't make sense! :-)
>>
>> Back in the olde days, wires crossing like that would have a "U" shape
>> to show the crossover, but that was too much trouble to draw, so they
>> started putting a big 'DOT' where it was a connection (like the one
>> just below the one in question). This was 'ok' for the original
>> drawing, but by the time it's photocopied a couple of (dozen) times
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>> 73, Garey - K4OAH
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>> JT wrote:
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>>> Recently got my first Drake which is a SPR-4 from a second hand shop.
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>>> The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
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>>> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
>>>
>>> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.
>>>
>>> Could someone please explain the working of this circuit.
>>>
>>> Thanks,
>>>
>>>

13277. Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 15:07:33 UTC
From: taner@btinternet.com
Topic: 13004 Message: 13277

That makes sense,

I was not able to see the TA4 board where it is suppose to be,so without tracing back the wires,in detail,to see where there are connected to,it may be as you said , is a step up transformer of some sort.
It has 6 tags on it.The speaker output appears to be connected to one of the wires of that transformer.Because the audio board was badly ""repaired "" I could not rely on the integrity of the wiring I am looking at.

What confused me more is the diagram I found,for TA4,which shows a transformer.But that one has only 4 connections.The one I have has 6.
On one side first and second tag are marked ,hand written p p,and one is connected to white and the other to a red wire, and the third one is earthed.
The other side has 2 wires,white and blue and white and green going to each side connectors but the one in the middle is not connected but had a wire soldered in the past but now cut-off?

On the back of the unit I have, there is a square shaped socket with 4 female connectors,but only 2 wires are soldered.

I guess I am 40 years too old and to late to work out how these drake series evolved.

But I am not going to give up,yet.

Many thanks,

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> JT -
>
> Hard to say what the transformer might be for without knowing where
> it's connected.
>
> I can explain the TA-4 operation, and make a guess what the
> transformer MIGHT have been for.
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> in the transmitter. When control of both by the transmitter is
> desired, a negative voltage of about -30 VDC to disable the receiver
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> semiconductor switches. The transformer you have is 'probably' a
> voltage step-up from the 4 ohm audio output of the SPR-4 (picked up at
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> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>
> taner@... wrote:
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> > Done some search and it seems that a TA4? was fitted sometime in the past.
> > So that the receiver can be linked to a transmitter.
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> >
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> >> the crossover isn't all that clear.
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> >> 73, Garey - K4OAH

> >> Glen Allen, VA
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> >>>
> >>> Could someone please explain the working of this circuit.
> >>>
> >>> Thanks,
> >>>
> >>>
>

13278. Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 15:49:23 UTC
From: Paul Christensen
Topic: 2620 Message: 13278

The Krylon 1613 arrived today. Fast overnight delivery from MSC Industrial in GA. It appears to be the "real deal." It's definitely labeled #1613, has the squared cap, old style nozzle, and disclaimer that reads "Not for Retail Sale."

MSC Industrial Part No. 00264671. USD $6.60 + shipping.

With the right paint in hand, I just wish I could trust my painting skills.

Paul, W9AC

----- Original Message -----
From: Paul Christensen
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 18, 2013 12:31 PM
Subject: Re: [DrakeRadio] Re: Drake paint

Been reading a similar issue on the Corvette forums. Owners there say that the original Krylon 1613 formulation is available only through industrial suppliers like MSC Industrial. According to them, the correct can has the old square top cap and not the newer rounded bullet style. The can will also state "Not for Retail Sale." I just ordered a can. If it's the right one, great. If not, it will be used for some other household application.

Paul, W9AC

----- Original Message -----
From: Paul Kraemer
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 18, 2013 12:05 PM
Subject: Re: [DrakeRadio] Re: Drake paint

At last. Someone who agrees with my findings
I've been saying that for years and just get "corrected" like I didn't know what I was talking about.

Krylon 1613 was discontinued years ago. It appears to have been a more lacquer based product, very nice to work with, and a perfect match to Drake. I suspect it was discontinued because of changes in regulations affecting voc in paint.

Krylon 51613 that some say is same---is not---it is glossier and not even close in test panels I did.
Some places on the internet list 1613 on search, collect your money and ship 51613. They don't have a clue what happened. Krylon says it is a substitute. You end up with more cans of 51613 for free that are just like the ones you got at WalMart for half the internet price with no shipping. Hey, at least you get your money back and free paint.

The EZ touch spray nozzles do not respond same as old nozzles that could be drilled out to spatter. They tend to spray more uniform regardless of light touch. Try to drill them and you get paint drool not spatter.

What to do? I found just using the Krylon flat and buffing with soft cloth dampened in mineral spirits lets you come up on the desired degree of satin so you can emulate and old 2B (which is not spattered) and a recent 4 line product so you can make the new look like the rest of the gear on the table.

How to spatter with a spray can? Practice X 3! When it comes time to do the final deed on the cabinet I work on a large shhet of cardboard, get the spatter going about right and try to move over the product without changing the spray pressure either finger or the clamp on handle accessory.

Options? Invest in a low cost HVLP spray rig from Harbor freight and get paint mixed at someplace like Sherwin Williams that does industrial finishes. Or, if you are going to do every Drake you own and just want a nice matcing finish just take them out someplace, have them stripped, bead blasted, powder coated satin black and be done with it. We have access to a lovely satin black powder coat right here in the stix.

Paul K0UYA
----- Original Message -----
From: <Chgypsy@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:09 AM
Subject: Re: [DrakeRadio] Re: Drake paint

> To the group,
>
>
> mgilger@... writes:
>
> If you go to Ron's web page, at www.wb4hfn.com you will find an
> article on painting cabinets, including the spacking.
> The information referred to is basically correct BUT the Krylon paint
> numbers are no longer as they are different names and blends.
> In addition the spackle method described will work, BUT NOT with the
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> Carl WD8NHK
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13279. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 15:57:28 UTC
From: Garey Barrell
Topic: 13004 Message: 13279

That sounds like a transformer for a push-pull audio stage, and
probably one that the previous owner had on hand. Ham spirit, you
know!! :-) Just used half the Hi-Z winding and one of the Low-Z
taps. Should be safe to remove it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

taner@... wrote:
> That makes sense,
>
> I was not able to see the TA4 board where it is suppose to be,so without tracing back the wires,in detail,to see where there are connected to,it may be as you said , is a step up transformer of some sort.
> It has 6 tags on it.The speaker output appears to be connected to one of the wires of that transformer.Because the audio board was badly ""repaired "" I could not rely on the integrity of the wiring I am looking at.
>
> What confused me more is the diagram I found,for TA4,which shows a transformer.But that one has only 4 connections.The one I have has 6.
> On one side first and second tag are marked ,hand written p p,and one is connected to white and the other to a red wire, and the third one is earthed.
> The other side has 2 wires,white and blue and white and green going to each side connectors but the one in the middle is not connected but had a wire soldered in the past but now cut-off?
>
> On the back of the unit I have, there is a square shaped socket with 4 female connectors,but only 2 wires are soldered.
>
> I guess I am 40 years too old and to late to work out how these drake series evolved.
>
> But I am not going to give up,yet.
>
> Many thanks,
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>

> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> JT -
>>
>> Hard to say what the transformer might be for without knowing where
>> it's connected.
>>
>> I can explain the TA-4 operation, and make a guess what the
>> transformer MIGHT have been for.
>>
>> The Drake 'Twins' enabled transceive operation with either R or T PTO
>> (VFO) controlling both units, or each controlling its own. A brief
>> description of the twins circuit topology is that the PTO (~5 - 5.5
>> MHz) is 'Premixed' with the BAND oscillator (18.1 MHz for 40M),
>> resulting in an LO for the 1st Mixer of ~13 MHz. This signal is then
>> mixed with the 7 MHz incoming signal, resulting in the 1st IF of 5.645
>> MHz. The transmitter uses a similar scheme, except the ~13 MHz
>> Premixer signal is mixed with the 5.645 MHz Carrier Oscillator to
>> produce the 7 MHz output signal.
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>> For transceive control of the pair from the Receiver, the Premixer in
>> the transmitter is disabled by a switch contact, and the Premixer
>> signal from the receiver via the INJ cable is applied to the 1st Mixer
>> in the transmitter. When control of both by the transmitter is
>> desired, a negative voltage of about -30 VDC to disable the receiver
>> Premixer stage is sent via the INJ cable, along with the transmitter
>> Premixer signal.
>>
>> What the TA-4 accessory does is emulate these functions by various
>> semiconductor switches. The transformer you have is 'probably' a
>> voltage step-up from the 4 ohm audio output of the SPR-4 (picked up at
>> the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX
>> signal to the T-4X.
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>> Glen Allen, VA
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>> taner@... wrote:
>>> Trying to repair the unit but I just discovered that there is a audio type transformer
fitted which is not on SPR-4 diagram.
>>> Done some search and it seems that a TA4? was fitted sometime in the past.
>>> So that the receiver can be linked to a transmitter.
>>> Looking at the circuit diagram of TA4 and the installation notes (found on the net)I
can not work out what this add-on does exactly.
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>>> Does the receiver bypasses its PTO and/or the Xtal Oscilators ?.
>>>

>>> In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?
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>>> Thanks,
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>>>> That lead is NOT connected where it crosses the Emitter lead of Q19.
>>>> That's why it doesn't make sense! :-)
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>>>> Back in the olde days, wires crossing like that would have a "U" shape
>>>> to show the crossover, but that was too much trouble to draw, so they
>>>> started putting a big 'DOT' where it was a connection (like the one
>>>> just below the one in question). This was 'ok' for the original
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>>>> JT wrote:
>>>>> Hi all,
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>>>>> Recently got my first Drake which is a SPR-4 from a second hand shop.
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>>>>> The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
>>>>>
>>>>> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
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>>>>> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.
>>>>>
>>>>> Could someone please explain the working of this circuit.
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>>>>> Thanks,
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13280. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 16:06:55 UTC
From: David Winfree
Topic: 2620 Message: 13280

I"ve done some spray painting, cars, boats, R4a, etc. This drilling the small valve hole and "spattering" takes practice. Distance, sweep speed, button press force, are all variables, in addition to the usual, temp. and humidity. Use a well lit area, maybe even a clear, windless day outside. Practice first on scrap sheet metal if possible. Shooting cardboard is not the same.

On Fri, Apr 19, 2013 at 11:49 AM, Paul Christensen <w9ac@...> wrote:

> **
>
>
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> in GA. It appears to be the "real deal." It's definitely labeled #1613, has
> the squared cap, old style nozzle, and disclaimer that reads "Not for
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> MSC Industrial Part No. 00264671. USD $6.60 + shipping.
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13281. Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 16:49:36 UTC
From: taner@btinternet.com
Topic: 13004 Message: 13281

Because it is in such a state,it is impossible to know what has been added or removed from this old receiver.
I have wired in a 12V regulator and a stand by audio amplifier and got some band noise (and an unknown BC station on first band range (A).

So that I can trace any other faults which may or may not be there.

Having band noise and receiving a broadcast (adjustable with RF gain control)tells me that RF amp,first and second IF and the mixers are working.

When I switched the xtal range switch It was very quite,so because my assumption that a TA4 board was added at some later stage I assumed that the Xtal Osc injection was turned off,and the my SPR4 needed to be linked to a Tx to receive its Xtal Osc signal.

And only receiving a band made me think I was only receiving just one band = PTO +/- 5645.

What I want to do next is to inject an external DDS directly to the first mixer,so that i can check the alignement of the preselectors and the working of the range switch.

I am gratefull for your guidance and wisdom,I guess you seen all these (ham spirit) before.:-)

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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13282. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 18:36:15 UTC
From: Garey Barrell
Topic: 13004 Message: 13282

OK. The manual has a complete description of the installation of the TA-4, so should be able to 'reverse engineer' those instructions to see what to undo.

The PTO runs from 5.455 to 4.955 MHz, with the highest frequency at the 000 end of the dial. There is NO crystal for BAND 0, 150 - 500 kHz, just the PTO directly to the 1st Mixer. If you only have one band, it's likely that the BAND oscillator isn't running (Q2).

Functions of the TA-4 include disabling the BAND and Premixer stages, and if it was just 'yanked out' the controlling lines of those stages need to be reconnected to ground or B+ as appropriate.

73, Garey - K4OAH
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>>>> the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX
>>>> signal to the T-4X.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> taner@ wrote:
>>>>> Trying to repair the unit but I just discovered that there is a audio type
transformer fitted which is not on SPR-4 diagram.
>>>>> Done some search and it seems that a TA4? was fitted sometime in the past.
>>>>> So that the receiver can be linked to a transmitter.
>>>>> Looking at the circuit diagram of TA4 and the installation notes (found on the net)I
can not work out what this add-on does exactly.
>>>>>
>>>>> Does the receiver bypasses its PTO and/or the Xtal Oscilators ?.

>>>>>
>>>>> In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?
>>>>>
>>>>> Thanks,
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>> That lead is NOT connected where it crosses the Emitter lead of Q19.
>>>>>> That's why it doesn't make sense! :-)
>>>>>>
>>>>>> Back in the olde days, wires crossing like that would have a "U" shape
>>>>>> to show the crossover, but that was too much trouble to draw, so they
>>>>>> started putting a big 'DOT' where it was a connection (like the one
>>>>>> just below the one in question). This was 'ok' for the original
>>>>>> drawing, but by the time it's photocopied a couple of (dozen) times
>>>>>> the crossover isn't all that clear.
>>>>>>
>>>>>> 73, Garey - K4OAH
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>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> JT wrote:
>>>>>>> Hi all,
>>>>>>>
>>>>>>> Recently got my first Drake which is a SPR-4 from a second hand shop.
>>>>>>>
>>>>>>> The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
>>>>>>>
>>>>>>> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
>>>>>>>
>>>>>>> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.
>>>>>>>
>>>>>>> Could someone please explain the working of this circuit.
>>>>>>>
>>>>>>> Thanks,
>>>>>>>
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>
> Yahoo! Groups Links

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13283. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 19:05:07 UTC
From: Richard Knoppow
Topic: 2620 Message: 13283

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:33 AM
Subject: RE: [DrakeRadio] Re: Drake paint

> Paul -
>
>
>
> I think you're right - I keep a similar
> product warning
> label on my bulletin board - It states: "PROPOSITION 65
> WARNING This
> product contains elements that if ingested may cause
> cancer in the state of
> California." (apologies to all you Native Sons out
> there...)
>
>
>
> Terry K7WLD
>
> Wenatchee, WA

That is NOT how the warning is worded, it is: This
product contains substances which are known by the State of
California to cause cancer". There is a similar warning on
businesses here that use cancer-causing materials.
Wait until someone you love comes down with cancer or
are diagnosed with it yourself, it will change your mind
about nanny state control of cancer causing substances.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13284. Re: [DrakeRadio] Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 19:13:24 UTC
From: Paul Kraemer
Topic: 2620 Message: 13284

Well that is great news Paul
I will order some as well
Thank-you for finding the real deal
Now it will probably be out of stock
Paul K0UYA
----- Original Message -----
From: "Paul Christensen" <w9ac@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 19, 2013 10:49 AM
Subject: [DrakeRadio] Drake paint

> The Krylon 1613 arrived today. Fast overnight delivery from MSC
> Industrial in GA. It appears to be the "real deal." It's definitely
> labeled #1613, has the squared cap, old style nozzle, and disclaimer that
> reads "Not for Retail Sale."
>
> MSC Industrial Part No. 00264671. USD $6.60 + shipping.
>
> With the right paint in hand, I just wish I could trust my painting
> skills.
>
> Paul, W9AC
>
>
> ----- Original Message -----
> From: Paul Christensen
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, April 18, 2013 12:31 PM
> Subject: Re: [DrakeRadio] Re: Drake paint
>
>
> Been reading a similar issue on the Corvette forums. Owners there say
> that the original Krylon 1613 formulation is available only through
> industrial suppliers like MSC Industrial. According to them, the correct
> can has the old square top cap and not the newer rounded bullet style.
> The can will also state "Not for Retail Sale." I just ordered a can. If
> it's the right one, great. If not, it will be used for some other
> household application.
>
> Paul, W9AC
>
>
> ----- Original Message -----
> From: Paul Kraemer
> To: DrakeRadio@yahoogroups.com

> Sent: Thursday, April 18, 2013 12:05 PM
> Subject: Re: [DrakeRadio] Re: Drake paint
>
>
>
> At last. Someone who agrees with my findings
> I've been saying that for years and just get "corrected" like I didn't
> know
> what I was talking about.
>
> Krylon 1613 was discontinued years ago. It appears to have been a more
> lacquer based product, very nice to work with, and a perfect match to
> Drake.
> I suspect it was discontinued because of changes in regulations
> affecting
> voc in paint.
>
> Krylon 51613 that some say is same---is not---it is glossier and not
> even
> close in test panels I did.
> Some places on the internet list 1613 on search, collect your money and
> ship
> 51613. They don't have a clue what happened. Krylon says it is a
> substitute.
> You end up with more cans of 51613 for free that are just like the ones
> you
> got at WalMart for half the internet price with no shipping. Hey, at
> least
> you get your money back and free paint.
>
> The EZ touch spray nozzles do not respond same as old nozzles that
> could be
> drilled out to spatter. They tend to spray more uniform regardless of
> light
> touch. Try to drill them and you get paint drool not spatter.
>
> What to do? I found just using the Krylon flat and buffing with soft
> cloth
> dampened in mineral spirits lets you come up on the desired degree of
> satin
> so you can emulate and old 2B (which is not spattered) and a recent 4
> line
> product so you can make the new look like the rest of the gear on the
> table.
>
> How to spatter with a spray can? Practice X 3! When it comes time to do
> the
> final deed on the cabinet I work on a large shhet of cardboard, get the
> spatter going about right and try to move over the product without
> changing

> the spray pressure either finger or the clamp on handle accessory.
>
> Options? Invest in a low cost HVLP spray rig from Harbor freight and
> get
> paint mixed at someplace like Sherwin Williams that does industrial
> finishes. Or, if you are going to do every Drake you own and just want
> a
> nice matcing finish just take them out someplace, have them stripped,
> bead
> blasted, powder coated satin black and be done with it. We have access
> to a
> lovely satin black powder coat right here in the stix.
>
> Paul K0UYA
> ----- Original Message -----
> From: <Chgypsy@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, April 18, 2013 10:09 AM
> Subject: Re: [DrakeRadio] Re: Drake paint
>
> > To the group,
> > >
> > >
> > > mgilger@... writes:
> > >
> > > If you go to Ron's web page, at www.wb4hfn.com you will find an
> > > article on painting cabinets, including the spacking.
> > > The information referred to is basically correct BUT the Krylon paint
> > > numbers are no longer as they are different names and blends.
> > > In addition the spackle method described will work, BUT NOT with the
> > > cans
> > > that have the twistable nozzles for horizontal/ vertical spray
> patterns.
> > > Carl WD8NHK
> > >
> > > [Non-text portions of this message have been removed]
> > >
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> > > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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13285. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 19:18:04 UTC
From: Paul Kraemer
Topic: 2620 Message: 13285

Richard
That has indeed happened to many I know. May they RIP
Most led pristine lives away from all bad influences, no smoke, drink, bad food, bad environment
Many more I know that are alive and well have paid no attention to any cautions
My belief is that God wills, people accept.
Paul
----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 19, 2013 2:05 PM
Subject: Re: [DrakeRadio] Re: Drake paint

>
> ----- Original Message -----
> From: "Terrell Hamilton" <hamilter@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, April 18, 2013 10:33 AM
> Subject: RE: [DrakeRadio] Re: Drake paint
>
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>> Paul -
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>> I think you're right - I keep a similar
>> product warning
>> label on my bulletin board - It states: "PROPOSITION 65
>> WARNING This
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>> cancer in the state of
>> California." (apologies to all you Native Sons out
>> there...)
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>> Terry K7WLD
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>> Wenatchee, WA
>
> That is NOT how the warning is worded, it is: This
> product contains substances which are known by the State of
> California to cause cancer". There is a similar warning on
> businesses here that use cancer-causing materials.

> Wait until someone you love comes down with cancer or
> are diagnosed with it yourself, it will change your mind
> about nanny state control of cancer causing substances.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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13286. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 19:28:32 UTC
From: HUTaner
Topic: 13004 Message: 13286

I dont think I explained myself correctly.

Looking at the machine there is no AT4 board,I can see 2 holes on the chassis,to screw the board down.It is possible that they fitted the AT4 in the past then just removed it without reversing the mods.I dont know yet.
The reason I first thought there was one because of,
a-there is a fitted audio transformer (but does not match of that AT4)
b-quite bands when xtals are switched on (I assumed the non existing AT4) was disabling the xtal Oscilators.

Like you said on band 0 only the PTO in injected to the first mixer so you get reception on 150 to 500 Khz.
On the other bands Xtal Osc frequency minus PTO frequency,after filtering,is injected to the 1st mixer,so you get to receive other bands.

So I have to check whether the xtal Oscilators are oscilating and also there is an injection to the first mixer which is Xtal frequency-PTO frequency.

I think,with your help,now know the way the SPR-4 works with or without AT4 .So it is easier to either reverse engineer if needed or to repair the fault ,

Best regards,

>_____
> From: Garey Barrell <k4oah@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Friday, 19 April 2013, 19:36
>Subject: Re: [DrakeRadio] Re: SPR-4 TA4
>
>
>
>
>OK. The manual has a complete description of the installation of the
>TA-4, so should be able to 'reverse engineer' those instructions to
>see what to undo.
>
>The PTO runs from 5.455 to 4.955 MHz, with the highest frequency at
>the 000 end of the dial. There is NO crystal for BAND 0, 150 - 500
>kHz, just the PTO directly to the 1st Mixer. If you only have one
>band, it's likely that the BAND oscillator isn't running (Q2).
>
>Functions of the TA-4 include disabling the BAND and Premixer stages,
>and if it was just 'yanked out' the controlling lines of those stages
>need to be reconnected to ground or B+ as appropriate.
>
>73, Garey - K4OAH

>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>taner@... wrote:
>>
>>
>>
>>
>> Because it is in such a state,it is impossible to know what has been added or removed from this old receiver.
>> I have wired in a 12V regulator and a stand by audio amplifier and got some band noise (and an unknown BC station on first band range (A).
>>
>> So that I can trace any other faults which may or may not be there.
>>
>> Having band noise and receiving a broadcast (adjustable with RF gain control)tells me that RF amp,first and second IF and the mixers are working.
>>
>> When I switched the xtal range switch It was very quite,so because my assumption that a TA4 board was added at some later stage I assumed that the Xtal Osc injection was turned off,and the my SPR4 needed to be linked to a Tx to receive its Xtal Osc signal.
>>
>> And only receiving a band made me think I was only receiving just one band = PTO +/- 5645.
>>
>> What I want to do next is to inject an external DDS directly to the first mixer,so that i can check the alignement of the preselectors and the working of the range switch.
>>
>> I am gratefull for your guidance and wisdom,I guess you seen all these (ham spirit) before.:-)
>>
>>
>>
>>
>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>> That sounds like a transformer for a push-pull audio stage, and
>>> probably one that the previous owner had on hand. Ham spirit, you
>>> know!! :-) Just used half the Hi-Z winding and one of the Low-Z
>>> taps. Should be safe to remove it.
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>>> Glen Allen, VA
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>>> taner@... wrote:
>>>> That makes sense,
>>>>
>>>> I was not able to see the TA4 board where it is suppose to be,so without tracing back the wires,in detail,to see where there are connected to,it may be as you said , is a step up transformer of some sort.
>>>> It has 6 tags on it.The speaker output appears to be connected to one of the wires of that transformer.Because the audio board was badly ""repaired "" I could not rely on the integrity of the wiring I am looking at.
>>>>
>>>> What confused me more is the diagram I found,for TA4,which shows a transformer.But that one has only 4 connections.The one I have has 6.
>>>> On one side first and second tag are marked ,hand written p p,and one is connected to white and the other to a red wire, and the third one is earthed.
>>>> The other side has 2 wires,white and blue and white and green going to each side connectors but the one in the middle is not connected but had a wire soldered in the past but now cut-off?
>>>>
>>>> On the back of the unit I have, there is a square shaped socket with 4 female connectors,but only 2 wires are soldered.
>>>>
>>>> I guess I am 40 years too old and to late to work out how these drake series evolved.
>>>>
>>>> But I am not going to give up,yet.
>>>>
>>>> Many thanks,
>>>>
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>>>>
>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>> JT -
>>>>>
>>>>> Hard to say what the transformer might be for without knowing where
>>>>> it's connected.
>>>>>
>>>>> I can explain the TA-4 operation, and make a guess what the
>>>>> transformer MIGHT have been for.
>>>>>
>>>>> The Drake 'Twins' enabled transceive operation with either R or T PTO
>>>>> (VFO) controlling both units, or each controlling its own. A brief
>>>>> description of the twins circuit topology is that the PTO (~5 - 5.5
>>>>> MHz) is 'Premixed' with the BAND oscillator (18.1 MHz for 40M),
>>>>> resulting in an LO for the 1st Mixer of ~13 MHz. This signal is then
>>>>> mixed with the 7 MHz incoming signal, resulting in the 1st IF of 5.645
>>>>> MHz. The transmitter uses a similar scheme, except the ~13 MHz

>>>>> Premixer signal is mixed with the 5.645 MHz Carrier Oscillator to
>>>>> produce the 7 MHz output signal.
>>>>>
>>>>> For transceive control of the pair from the Receiver, the Premixer in
>>>>> the transmitter is disabled by a switch contact, and the Premixer
>>>>> signal from the receiver via the INJ cable is applied to the 1st Mixer
>>>>> in the transmitter. When control of both by the transmitter is
>>>>> desired, a negative voltage of about -30 VDC to disable the receiver
>>>>> Premixer stage is sent via the INJ cable, along with the transmitter
>>>>> Premixer signal.
>>>>>
>>>>> What the TA-4 accessory does is emulate these functions by various
>>>>> semiconductor switches. The transformer you have is 'probably' a
>>>>> voltage step-up from the 4 ohm audio output of the SPR-4 (picked up at
>>>>> the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX
>>>>> signal to the T-4X.
>>>>>
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>>>>>> Looking at the circuit diagram of TA4 and the installation notes (found on the net)I
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>>>>>>
>>>>>> In any case I only want to use this SPR-4 for SWL so what is the quickest way to
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>>>>>>> That's why it doesn't make sense! :-)
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>>>>>>>> The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
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>>>>>>>> Could someone please explain the working of this circuit.
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>> ------------------------------------
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>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13287. Need R4C Crystal Cover

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 19:38:19 UTC
From: Edward
Topic: 13004 Message: 13287

Looking for one of these in nice shape. Would prefer an original. Not sure if Sherwood's are anodized or numbered like the original. Does anybody know?Thanks.

Ed NI6S

Sent from my iPhone

On Apr 19, 2013, at 22:28, HUTaner <taner@...> wrote:

> I dont think I explained myself correctly.
>
> Looking at the machine there is no AT4 board,I can see 2 holes on the chassis,to screw the board down.It is possible that they fitted the AT4 in the past then just removed it without reversing the mods.I dont know yet.
> The reason I first thought there was one because of,
> a-there is a fitted audio transformer (but does not match of that AT4)
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> I think,with your help,now know the way the SPR-4 works with or without AT4 .So it is easier to either reverse engineer if needed or to repair the fault ,
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> Best regards,
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>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Friday, 19 April 2013, 19:36

>> Subject: Re: [DrakeRadio] Re: SPR-4 TA4
>>
>>
>>
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>> TA-4, so should be able to 'reverse engineer' those instructions to
>> see what to undo.
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i can check the alignement of the preselectors and the working of the range switch.
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>>>>>> description of the twins circuit topology is that the PTO (~5 - 5.5
>>>>>> MHz) is 'Premixed' with the BAND oscillator (18.1 MHz for 40M),
>>>>>> resulting in an LO for the 1st Mixer of ~13 MHz. This signal is then
>>>>>> mixed with the 7 MHz incoming signal, resulting in the 1st IF of 5.645
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>>>>>> the transmitter is disabled by a switch contact, and the Premixer
>>>>>> signal from the receiver via the INJ cable is applied to the 1st Mixer
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>>>>>> the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX
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>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
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>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>>>>>>> Could someone please explain the working of this circuit.
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>>>>>>>>> Thanks,
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>>> ------------------------------------
>>>

>>> Yahoo! Groups Links
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13288. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 20:17:26 UTC
From: Garey Barrell
Topic: 13004 Message: 13288

Do you have the manual showing how to install the TA-4?? This will
show you what would have been there with it installed. From a
functional standpoint, that transformer connected to the speaker
output _IS_ almost certainly the one associated with installation of
a TA-4. I don't think it came with the TA-4 kit.

Probably sold the TA-4 in a 'separate auction' on eBay! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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HUTaner wrote:
> I dont think I explained myself correctly.
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> Looking at the machine there is no AT4 board,I can see 2 holes on the chassis,to screw the board down.It is possible that they fitted the AT4 in the past then just removed it without reversing the mods.I dont know yet.
> The reason I first thought there was one because of,
> a-there is a fitted audio transformer (but does not match of that AT4)
> b-quite bands when xtals are switched on (I assumed the non existing AT4) was disabling the xtal Oscilators.
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> Like you said on band 0 only the PTO in injected to the first mixer so you get reception on 150 to 500 Khz.
> On the other bands Xtal Osc frequency minus PTO frequency,after filtering,is injected to the 1st mixer,so you get to receive other bands.
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> So I have to check whether the xtal Oscilators are oscilating and also there is an injection to the first mixer which is Xtal frequency-PTO frequency.
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> I think,with your help,now know the way the SPR-4 works with or without AT4 .So it is easier to either reverse engineer if needed or to repair the fault ,
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> Best regards,
>
>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Friday, 19 April 2013, 19:36
>> Subject: Re: [DrakeRadio] Re: SPR-4 TA4
>>

>>
>> OK. The manual has a complete description of the installation of the
>> TA-4, so should be able to 'reverse engineer' those instructions to
>> see what to undo.
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>> The PTO runs from 5.455 to 4.955 MHz, with the highest frequency at
>> the 000 end of the dial. There is NO crystal for BAND 0, 150 - 500
>> kHz, just the PTO directly to the 1st Mixer. If you only have one
>> band, it's likely that the BAND oscillator isn't running (Q2).
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>> Functions of the TA-4 include disabling the BAND and Premixer stages,
>> and if it was just 'yanked out' the controlling lines of those stages
>> need to be reconnected to ground or B+ as appropriate.
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(and an unknown BC station on first band range (A).
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>>> So that I can trace any other faults which may or may not be there.
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>>> Having band noise and receiving a broadcast (adjustable with RF gain control)tells me
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>>> What I want to do next is to inject an external DDS directly to the first mixer,so that
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>>>>> But I am not going to give up,yet.
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>>>>>>>>> Thanks,
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13289. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 20:45:16 UTC
From: HUTaner
Topic: 13004 Message: 13289

Probably sold the TA-4 in a 'separate auction' on eBay! :-) I think you are right

>_____
> From: Garey Barrell <k4oah@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Friday, 19 April 2013, 21:17
>Subject: Re: [DrakeRadio] Re: SPR-4 TA4
>
>
>
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>Do you have the manual showing how to install the TA-4?? This will
>show you what would have been there with it installed. From a
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>> Best regards,
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>>> _____
>>> From: Garey Barrell <k4oah@mindspring.com>
>>> To: DrakeRadio@yahoogroups.com
>>> Sent: Friday, 19 April 2013, 19:36
>>> Subject: Re: [DrakeRadio] Re: SPR-4 TA4
>>>
>>>
>>> OK. The manual has a complete description of the installation of the
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>

[Non-text portions of this message have been removed]

13290. RE: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 21:34:12 UTC
From: Terrell Hamilton
Topic: 2620 Message: 13290

Richard, you're probably right about what my label was SUPPOSED to say, but I'm looking at the one I took from the zip cord of something I bought a couple of years ago, and it definitely says "IN the state of California."

I've kept it to remind me how important language is - it's kind of a GIGO thing - sloppy writing often causes confusion instead of communication.

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Richard Knoppow
Sent: Friday, April 19, 2013 12:05 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Drake paint

----- Original Message -----
From: "Terrell Hamilton" <hamilter@... <mailto:hamilter%40nwi.net> >
To: <DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Thursday, April 18, 2013 10:33 AM
Subject: RE: [DrakeRadio] Re: Drake paint

> Paul -
>
>
>
> I think you're right - I keep a similar
> product warning
> label on my bulletin board - It states: "PROPOSITION 65
> WARNING This
> product contains elements that if ingested may cause
> cancer in the state of
> California." (apologies to all you Native Sons out
> there...)
>
>
>
> Terry K7WLD
>
> Wenatchee, WA

That is NOT how the warning is worded, it is: This product contains substances which are known by the State of California to cause cancer". There is a similar warning on businesses here that use cancer-causing materials.
Wait until someone you love comes down with cancer or are diagnosed with it yourself, it will change your mind about nanny state control of cancer causing substances.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

13291. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 21:54:56 UTC
From: William Houghton
Topic: 2620 Message: 13291

Hmmm, reminds me of the statement I have seen in user manuals for Japanese gear:

"Specifications subject to change for an improvement without notice".

I always wondered why you would design an improvement that can't be noticed.

From: Terrell Hamilton <hamilter@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, April 19, 2013 2:34:20 PM
Subject: RE: [DrakeRadio] Re: Drake paint

Richard, you're probably right about what my label was SUPPOSED to say, but
I'm looking at the one I took from the zip cord of something I bought a
couple of years ago, and it definitely says "IN the state of California."

I've kept it to remind me how important language is - it's kind of a GIGO
thing - sloppy writing often causes confusion instead of communication.

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
Behalf Of Richard Knoppow
Sent: Friday, April 19, 2013 12:05 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Drake paint

----- Original Message -----
From: "Terrell Hamilton" <hamilter@... <mailto:hamilter%40nwi.net> >
To: <DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> >
Sent: Thursday, April 18, 2013 10:33 AM
Subject: RE: [DrakeRadio] Re: Drake paint

> Paul -
>
>
>
> I think you're right - I keep a similar
> product warning
> label on my bulletin board - It states: "PROPOSITION 65
> WARNING This
> product contains elements that if ingested may cause
> cancer in the state of
> California." (apologies to all you Native Sons out
> there...)
>
>
>
> Terry K7WLD

>
> Wenatchee, WA

That is NOT how the warning is worded, it is: This
product contains substances which are known by the State of
California to cause cancer". There is a similar warning on
businesses here that use cancer-causing materials.
Wait until someone you love comes down with cancer or
are diagnosed with it yourself, it will change your mind
about nanny state control of cancer causing substances.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@... <mailto:dickburk%40ix.netcom.com>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13292. Re: [DrakeRadio] Re: SPR-4 TA4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-19 23:09:37 UTC
From: DRogers
Topic: 13004 Message: 13292

I just noticed that you bought the radio from a 2nd hand shop and not ebay. Mea culpa. I will back quietly out of the room with my head bowed low.

Sorry for the noise.

David, WA7ZYQ

----- Original Message -----
From: taner@...
To: DrakeRadio@yahoogroups.com
Sent: Friday, April 19, 2013 8:07 AM
Subject: [DrakeRadio] Re: SPR-4 TA4

That makes sense,

I was not able to see the TA4 board where it is suppose to be,so without tracing back the wires,in detail,to see where there are connected to,it may be as you said , is a step up transformer of some sort.
It has 6 tags on it.The speaker output appears to be connected to one of the wires of that transformer.Because the audio board was badly ""repaired "" I could not rely on the integrity of the wiring I am looking at.

What confused me more is the diagram I found,for TA4,which shows a transformer.But that one has only 4 connections.The one I have has 6.
On one side first and second tag are marked ,hand written p p,and one is connected to white and the other to a red wire, and the third one is earthed.
The other side has 2 wires,white and blue and white and green going to each side connectors but the one in the middle is not connected but had a wire soldered in the past but now cut-off?

On the back of the unit I have, there is a square shaped socket with 4 female connectors,but only 2 wires are soldered.

I guess I am 40 years too old and to late to work out how these drake series evolved.

But I am not going to give up,yet.

Many thanks,

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> JT -
>
> Hard to say what the transformer might be for without knowing where
> it's connected.
>
> I can explain the TA-4 operation, and make a guess what the
> transformer MIGHT have been for.

>
> The Drake 'Twins' enabled transceive operation with either R or T PTO
> (VFO) controlling both units, or each controlling its own. A brief
> description of the twins circuit topology is that the PTO (~5 - 5.5
> MHz) is 'Premixed' with the BAND oscillator (18.1 MHz for 40M),
> resulting in an LO for the 1st Mixer of ~13 MHz. This signal is then
> mixed with the 7 MHz incoming signal, resulting in the 1st IF of 5.645
> MHz. The transmitter uses a similar scheme, except the ~13 MHz
> Premixer signal is mixed with the 5.645 MHz Carrier Oscillator to
> produce the 7 MHz output signal.
>
> For transceive control of the pair from the Receiver, the Premixer in
> the transmitter is disabled by a switch contact, and the Premixer
> signal from the receiver via the INJ cable is applied to the 1st Mixer
> in the transmitter. When control of both by the transmitter is
> desired, a negative voltage of about -30 VDC to disable the receiver
> Premixer stage is sent via the INJ cable, along with the transmitter
> Premixer signal.
>
> What the TA-4 accessory does is emulate these functions by various
> semiconductor switches. The transformer you have is 'probably' a
> voltage step-up from the 4 ohm audio output of the SPR-4 (picked up at
> the PHONES jack) and matched to ~3-4 k ohms to supply the ANTI-VOX
> signal to the T-4X.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> taner@... wrote:
> >
> > Trying to repair the unit but I just discovered that there is a audio type transformer fitted which is not on SPR-4 diagram.
> > Done some search and it seems that a TA4? was fitted sometime in the past.
> > So that the receiver can be linked to a transmitter.
> > Looking at the circuit diagram of TA4 and the installation notes (found on the net)I can not work out what this add-on does exactly.
> >
> > Does the receiver bypasses its PTO and/or the Xtal Oscilators ?.
> >
> > In any case I only want to use this SPR-4 for SWL so what is the quickest way to remove/disable this add-on (if it needs to be)?
> >
> > Thanks,
> >
> >
> >

> >
> >> That lead is NOT connected where it crosses the Emitter lead of Q19.
> >> That's why it doesn't make sense! :-)
> >>
> >> Back in the olde days, wires crossing like that would have a "U" shape
> >> to show the crossover, but that was too much trouble to draw, so they
> >> started putting a big 'DOT' where it was a connection (like the one
> >> just below the one in question). This was 'ok' for the original
> >> drawing, but by the time it's photocopied a couple of (dozen) times
> >> the crossover isn't all that clear.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> JT wrote:
> >>> Hi all,
> >>>
> >>> Recently got my first Drake which is a SPR-4 from a second hand shop.
> >>>
> >>> The audio board is burnt out and the 12V regulator board looks badly repaired.The regulator transistor looks like a replacement,hanging in the air.
> >>>
> >>> I managed to get a copy of the circuit diagram and repairing the 12V supply board looks fairly straightforward.
> >>>
> >>> But I can not work out the line going from the junction of Q19 Emitter/Q20 Collector and R82 to S14R and CR10.
> >>>
> >>> Could someone please explain the working of this circuit.
> >>>
> >>> Thanks,
> >>>
> >>>
>

[Non-text portions of this message have been removed]

13293. Re: [DrakeRadio] Re: TR-4 to buy or not

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 00:06:43 UTC
From: Steve Wedge
Topic: 13224 Message: 13293

I'll second that. I've got one here I won for $200 and it needs work, but I was expecting that.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Thursday, April 18, 2013 11:23 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: TR-4 to buy or not

Yep, I paid far more than that, for a TR4, with issues. GREAT DEAL!!

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 18, 2013, at 20:12, William Houghton <rdrbill@...> wrote:

> Sounds like you stole it for US $207 - hihi!
>
>
>
>
> _____
> From: zl1bbw <calf4u@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thu, April 18, 2013 7:32:59 PM
> Subject: [DrakeRadio] Re: TR-4 to buy or not
>
>
> Well I am now the produ (I hope) owner of a TR4 RV4 AC4 and a shure 444mic for
> the total of $250NZ that is $207 US, plus I have to get it here, that will take
> a bit of ham intervention I hope to get it closer then I can go and pick it up.
>
> I am fortunate at the moment having 15 acres of flat land, and just coming to 65

> so easing off a little bit, that the time for hamming is back in my life.
>
> i hope the TR4 looks good alongisde the B & C line, have got a 75A4 that I have
> owned for 50 years that needs recapping a new dial sticky on it.
>
> But I see these people spending 6 or 7k on a rig in a el cheapo vertical, and I
> do wonder what is the big idea.
>
> Regards to all
>
> Oh just built my Winkeyer and got that working so life is looking up :-)
>
> --- In DrakeRadio@yahoogroups.com, John Sehring <wb0eq@...> wrote:
>>
>> I could not agree more with you!
>>
>> Absolutely the best place to spend $$ is on the antenna. This fact is hardly
>> on the mind of most. They think they need megabuck radios--not!
>>
>> A friend just put Drake Twins on the air. His comment, funny thing, these
>> radios hear just as good as my IcYeasWood expensive radio.
>>
>> Yes, within its limitations, the R-4B is just fine, IMO. Of course, less so in
>> contests. I find a good external DSP-driven audio filter is very useful on
>> these radios. I use the Timewave 59+, are now pretty cheap used.
>>
>> And you can fix the radio yourself.
>
>>
>> Basically, I don't want anything in my shack that I cannot repair!
>>
>> Too bad about slim ham population. Yes, no QRM but lonely, no? I've lived in
>> the most sparsely populated places in North America. We had 3 hams in whole
>> county, size = 100 mi. x 100 mi. One moved away, one SK'd, well...
>>
>>
>>> A friend in the UK keeps on at me to buy some new gear, but it is so expensive
>> in NZ its unreal and no back up service of any value, >so why should I get a
>> FT1000 or better at 10 times the price and zero times the repairability. Reckon
>> the best place to spend money is up in air on antennas. Will see if I can catch
>> this one, and report back.
>>
>>> A good Datong audio filter sorts out many of the audio issues.
>>
>>> Also not a great Ham population up here, think I am the only one on HF within
>> 30 or 40 miles, so no nearby problems.
>>
>>
>> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada
>

>
>
>
> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13294. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 00:50:33 UTC
From: Richard Knoppow
Topic: 2620 Message: 13294

----- Original Message -----
From: "Paul Kraemer" <elespe@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 19, 2013 12:18 PM
Subject: Re: [DrakeRadio] Re: Drake paint

> Richard
> That has indeed happened to many I know. May they RIP
> Most led pristine lives away from all bad influences, no
> smoke, drink, bad
> food, bad environment
> Many more I know that are alive and well have paid no
> attention to any
> cautions
> My belief is that God wills, people accept.
> Paul

I have a friend who has had cancer twice. Different
kinds not a recurrence. She had the predisposing conditions
for neither. So, no, you can't tell. But statistically the
occurrences of cancer do follow all sorts of predisposing
conditions so it pays to avoid things that have proved to be
dangerous.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13295. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 00:52:35 UTC
From: Richard Knoppow
Topic: 2620 Message: 13295

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 19, 2013 2:34 PM
Subject: RE: [DrakeRadio] Re: Drake paint

> Richard, you're probably right about what my label was
> SUPPOSED to say, but
> I'm looking at the one I took from the zip cord of
> something I bought a
> couple of years ago, and it definitely says "IN the state
> of California."
>
>
>
> I've kept it to remind me how important language is - it's
> kind of a GIGO
> thing - sloppy writing often causes confusion instead of
> communication.
>
>
I certainly can't argue about sloppy language. A few
minutes listening to AM radio will be enough. Maybe it
causes cancer in California too.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13296. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 01:33:25 UTC
From: Dan Galligan
Topic: 2620 Message: 13296

Richard,
I am beginning to believe that the real cause of cancer in California, is the cancerous atmosphere, in California. And I don't mean the highly polluted air that we breathe.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 19, 2013, at 17:52, Richard Knoppow <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Terrell Hamilton" <hamilter@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 19, 2013 2:34 PM
> Subject: RE: [DrakeRadio] Re: Drake paint
>
>
>> Richard, you're probably right about what my label was
>> SUPPOSED to say, but
>> I'm looking at the one I took from the zip cord of
>> something I bought a
>> couple of years ago, and it definitely says "IN the state
>> of California."
>>
>>
>>
>> I've kept it to remind me how important language is - it's
>> kind of a GIGO
>> thing - sloppy writing often causes confusion instead of
>> communication.
>>
>>
> I certainly can't argue about sloppy language. A few
> minutes listening to AM radio will be enough. Maybe it
> causes cancer in California too.
>
>

> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
>

[Non-text portions of this message have been removed]

13297. Re: [DrakeRadio] Re: Drake paint

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 02:42:39 UTC
From: Steve Wedge
Topic: 2620 Message: 13297

No, I don't think so.

Steve Wedge, W1ES/4
One parent, one grandparent lost to cancer.

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Friday, April 19, 2013 3:05 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: Drake paint

----- Original Message -----
From: "Terrell Hamilton" <hamilter@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 18, 2013 10:33 AM
Subject: RE: [DrakeRadio] Re: Drake paint

> Paul -
>
>
>
> I think you're right - I keep a similar
> product warning
> label on my bulletin board - It states: "PROPOSITION 65
> WARNING This
> product contains elements that if ingested may cause
> cancer in the state of
> California." (apologies to all you Native Sons out
> there...)
>
>
>
> Terry K7WLD
>
> Wenatchee, WA

That is NOT how the warning is worded, it is: This
product contains substances which are known by the State of
California to cause cancer". There is a similar warning on
businesses here that use cancer-causing materials.
Wait until someone you love comes down with cancer or
are diagnosed with it yourself, it will change your mind
about nanny state control of cancer causing substances.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13298. Re: FS: Ready to Play TR4 System--TR4 SOLD---

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 15:49:00 UTC
From: captcurt2000
Topic: 13125 Message: 13298

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
>
> That is a version 8 of the TR-4, one of the last made. The highest s/n
> I'veseen is 328xx, and the TR-4C started at 34000, leading me to
> believe that the 33000 block was skipped. Perhaps they didn't want
> to start on an odd number! :-)
>
> Does that unit have a plug-in relay under the chassis, or the wired-in
> relay near the power connector?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> captcurt2000 wrote:
> > GA List:
> >
> > Thinning out some of my collection here so have this very nice TR4 system for sale:
> >
> > TR4- Late production unit with the NB knob. Front panel and case is 8.5-9 condition. No case scratches or rust etc. It is the very light-textured powder coat original. Only a couple of faint foot marks from stuff sitting on top of it. Front panel is excellent. LED lighting. VFO is smooth and no jumping. All controls, switches, modes operate quietly and properly. Rig is the best sounding SSB rig I have. Copper is fair to good--no corrosion only some spotting and dust--see pictures.
> >
> > RV4- Remote VFO works as it should. Front panel is good to very good. Standard lighting. Case has been refinished well with paint. Copper is bright and shiny--excellent. Works perfectly with the TR4 as it should.
> >
> > AC4-R- Standard AC4 with the heathkit shop refit kit installed. Cover is clean and bright. Runs quietly inside the RV-4. Will ship removed from RV-4.
> >
> > This set-up is ready to plug and play--full power and looks as good as it sounds.
> >
> > See photo album here:
https://picasaweb.google.com/captcurt08/TR4RV4AC4R?authkey=Gv1sRgCOHE05Kz0MrnRg
> >
> > Asking $650 and split actual shipping of 3 boxes via Fedex Ground to lower 48
> >
> > Please contact me off list

> >
> > KU8L@...
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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>

13299. Re: TR-4 Repair (Added)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 17:47:11 UTC
From: slowcountry1
Topic: 13108 Message: 13299

Garey,

Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.

I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.

With the selector switch in Cal, the S-Meter produces readings on the following bands;

80M S9+30
40M S9+10
20M S7
15M S1
10M no S reading change.

The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.

I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.

Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?

Thanks for all of your help,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> It is not unusual for there to be caps and resistors inside
> transformers. I suppose if it's not marked it may be a bypass or no
> telling. I suspect what has happened is that someone tried to move it
> to CB and failed, and then either that person or someone else has
> tried to return it to stock.
>
> You can certainly mount the cap on the terminals on the outside of the
> transformer. There may be some coupling problems, but I doubt it.
> Certainly worth trying until you find the right one. Sometimes these
> caps are selected to account for variations in coil windings, plus
> ferrites were not nearly as consistent from batch to batch as they are

> today. Once you find a suitable value, I'd move it inside the can
> just to be safe. Be sure and use stable capacitors such as silver
> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> of pFs, but I could be wrong. If you are able to measure the existing
> cap it would give you a starting point.
>
> It's certainly possible that a model had a different layout, although
> I've not seen any significant variations. If you look in the
> 'Versions' directory, there are a couple of Drake photos of different
> models that may help determine if something is abnormal.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
> >
> > On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> >
> > I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
> >
> > It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> >
> > In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> >
> > Regards,
> >
> > Doug N9XTF
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> One other thing. Compare your repaired areas with the photos inthe
> >> CD. Some of the wiring, especially in the PA and CO area is
> >> critical. This is the best way to make sure everything is back where

> >> it should be!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
> >>>
>

13300. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 18:36:04 UTC
From: Garey Barrell
Topic: 13108 Message: 13300

Doug -

Progress!

Have you checked the BAND oscillator? Swap V1. Do you get a strong negative voltage on TP? Does it peak with L1 or L2 as expected? Does RF TUNE peak as it should? If you can't get a meter reading, you should be ableto hear the signal on an external receiver andtune for loudest signal to verify tuning. Do all the adjustments in Section VIII, para J peak as they should? Again if you can't get plate current, tune for max signal in an external receiver.

The problem(s) have to be in this area. Did you get access to a scope? Makes these types of problems much easier to track down. You can compare the input and output of various stages to see if you have gain or perhaps loss onone or more bands. And be sure the BANDoscillatoris running strong on the higher bands.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
>
> I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
>
> With the selector switch in Cal, the S-Meter produces readings on the following bands;
>
> 80M S9+30
> 40M S9+10
> 20M S7
> 15M S1
> 10M no S reading change.
>
> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
>

> I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
>
> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
>
> Thanks for all of your help,
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> It is not unusual for there to be caps and resistors inside
>> transformers. I suppose if it's not marked it may be a bypass or no
>> telling. I suspect what has happened is that someone tried to move it
>> to CB and failed, and then either that person or someone else has
>> tried to return it to stock.
>>
>> You can certainly mount the cap on the terminals on the outside of the
>> transformer. There may be some coupling problems, but I doubt it.
>> Certainly worth trying until you find the right one. Sometimes these
>> caps are selected to account for variations in coil windings, plus
>> ferrites were not nearly as consistent from batch to batch as they are
>> today. Once you find a suitable value, I'd move it inside the can
>> just to be safe. Be sure and use stable capacitors such as silver
>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
>> of pFs, but I could be wrong. If you are able to measure the existing
>> cap it would give you a starting point.
>>
>> It's certainly possible that a model had a different layout, although
>> I've not seen any significant variations. If you look in the
>> 'Versions' directory, there are a couple of Drake photos of different
>> models that may help determine if something is abnormal.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.

>>>
>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
>>>
>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
>>>
>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
>>>
>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
>>>
>>> Regards,
>>>
>>> Doug N9XTF
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> One other thing. Compare your repaired areas with the photos inthe
>>>> CD. Some of the wiring, especially in the PA and CO area is
>>>> critical. This is the best way to make sure everything is back where
>>>> it should be!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>
>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
>>>>>

13301. Re: [DrakeRadio] Re: FS: Ready to Play TR4 System--TR4 SOLD---

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-20 19:00:04 UTC
From: Dan Galligan
Topic: 13125 Message: 13301

And, Garey, perhaps if Mr. Drake, had been prone to imbibing barley pop, from the "Glass lined tanks, of old Latrobe" (aka Rolling Rock), he might have preferred to begin ALL of his serial numbers, with the number 33.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>
>>
>> That is a version 8 of the TR-4, one of the last made. The highest s/n
>> I'veseen is 328xx, and the TR-4C started at 34000, leading me to
>> believe that the 33000 block was skipped. Perhaps they didn't want
>> to start on an odd number! :-)
>>
>> Does that unit have a plug-in relay under the chassis, or the wired-in
>> relay near the power connector?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>

[Non-text portions of this message have been removed]

13302. SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 08:16:46 UTC
From: taner@btinternet.com
Topic: 13302 Message: 13302

The mystery transformer is an impedance step up transformer and nothing to do with a TA4.

Wiring on one side (secondary)is in parallel with the speaker output socket.
The other side (primary)is connected to a headphone socket at the front and also,in parallel to a 4 pin add-on socket at the back with 4 female receptacles (only 2 are wired),

So I do not have a TA4 (location is empty anyway).

Thanks to all who replied/sent diagram and pictures.

13303. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 13:56:04 UTC
From: W6IDS
Topic: 13223 Message: 13303

I'd be interested in the circuit as well.

Howard W6IDS
Richmond, IN EM79NV

-----Original Message-----
From: Robert Spooner
Sent: Monday, April 15, 2013 8:41 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

Paul,

If you find the schematic, I would very much like to have a copy. I'd like
to build a solid state TR switch to use with my station.

73,
Bob AD3K

On Apr 15, 2013, at 3:07 PM, Paul Kraemer <elespe@...> wrote:

> Interesting
> I know an old time op that designed and built a QSK tr switch around the
> 1N4xxx diodes, and a lot of other components and transistors. I have a
> schematic---someplace around here
> He used it with OMNI VI and the 30S-1 linear. He claimed the OMNI was only
> rig that could keep up with him and the rig topped out at 87wpm. I have
> seen him operate and it is pure pleasure to observe.
> Navy telegrapher (ret) in sub marine service. You may know him, Lyle,
> lives
> in Galesburg IL.
> Paul K0UYA

<SNIP>

13304. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 16:12:10 UTC
From: Chgypsy@...
Topic: 13223 Message: 13304

There you go. Carl wd8nhk

w6ids@... writes:

I'd be interested in the circuit as well.
http://www.k9ew.us/images/baqsk_tr_switch.jpg

Howard W6IDS Richmond, IN EM79NV

[Non-text portions of this message have been removed]

13305. Drake TR-4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 17:34:09 UTC
From: Fred
Topic: 13305 Message: 13305

Have for sale a 1970 model Drake TR-4 excess to my needs now. Serial number 31977. It has the matching speaker, MS-4, with it. It is in excellent condition. It has the PNB-34 noise blanker,new Sylvania 6jb6a final tubes,Heil 5.1 conversion in the D-104 mic,Heathkit shop mod. in AC-4 power supply. Also have with it a DD-103 Univerisal Digtal Dial by Electronic Speciaty Products. It has been serviced by Dave Harmon [K6XYZ] a Drake and Collins expert or anything with tubes in it. He said it had never had a solder iron to it till he put the finals in. On his bench on 80 meters he had 220 watts out of it. He said it looks like it just came off the line. It is just as good as his TR-4CW he bought new. He is good on QRZ if you want to contact him. I am asking $700.00 plus shipping for it. Contact me offline at my email address. Thanks.

13306. Drake TR-4 For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 17:39:57 UTC
From: Fred
Topic: 13305 Message: 13306

I will also add I can send pictures if asked. Thanks.

13307. RE: [DrakeRadio] SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 18:29:15 UTC
From: Terrell Hamilton
Topic: 13302 Message: 13307

OK, all - I'm used to exposing my ignorance, so what the heck is a TA4?

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of taner@...
Sent: Sunday, April 21, 2013 1:17 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] SPR-4 TA4 Update

The mystery transformer is an impedance step up transformer and nothing to do with a TA4.

Wiring on one side (secondary)is in parallel with the speaker output socket.
The other side (primary)is connected to a headphone socket at the front and also,in parallel to a 4 pin add-on socket at the back with 4 female receptacles (only 2 are wired),

So I do not have a TA4 (location is empty anyway).

Thanks to all who replied/sent diagram and pictures.

[Non-text portions of this message have been removed]

13308. Re: [DrakeRadio] SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 18:34:23 UTC
From: Don Cunningham
Topic: 13302 Message: 13308

Terry,

I can get close (I think). I believe that to be a "transmit adapter" to allow the SPR-4 to work with a transmitter (hopefully Drake, hi). If I'm wrong, I'll get corrected, but I think that is close.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6262 - Release Date: 04/21/13

[Non-text portions of this message have been removed]

13309. Re: [DrakeRadio] SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 19:24:43 UTC
From: Garey Barrell
Topic: 13302 Message: 13309

Don -

You gots it! :-) It's a small board that fits in the SPR-4 to allow it to transceive with any of the T-4 series transmitters. Basically it controls the PreMixer in the SPR-4 as is done in the R-4 series to enable transceive in either direction, just like the twins. Fairly rare item but would be easy to replicate. Just a half dozen small-signal transistors and no transformers or other special parts.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Terry,
>
> I can get close (I think). I believe that to be a "transmit adapter" to allow the SPR-4 to work with a transmitter (hopefully Drake, hi). If I'm wrong, I'll get corrected, but I think that is close.
> 73,
> Don, WB5HAK
>

13310. RE: [DrakeRadio] SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 19:30:31 UTC
From: Terrell Hamilton
Topic: 13302 Message: 13310

Thanks, Don - I happen to have a SPR-4, along with the crystal sidecar described in QST (74, as I recall) that helps it to cover most of the spectrum. I love the radio as it is, but one of those TA thingees might be a cool accessory.

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Don Cunningham
Sent: Sunday, April 21, 2013 11:34 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] SPR-4 TA4 Update

Terry,

I can get close (I think). I believe that to be a "transmit adapter" to allow the SPR-4 to work with a transmitter (hopefully Drake, hi). If I'm wrong, I'll get corrected, but I think that is close.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6262 - Release Date: 04/21/13

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13311. Re: [DrakeRadio] SPR-4 TA4 Update

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 20:06:38 UTC
From: Don Cunningham
Topic: 13302 Message: 13311

Terry,

I don't know if Garey has any info on the TA-4, but I suspect the schematic can be found on the internet and from Garey's description, it should be simple to replicate. Glad I could help, as I actually lived during the time of the SPR-4, and should have been in the gray matter somewhere, hi. I read ALL the catalogs at that time, as a 10 year old didn't have close to the amount needed in the late 50's to ever buy one, hi. Nice rigs though.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6262 - Release Date: 04/21/13

[Non-text portions of this message have been removed]

13312. General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 20:18:36 UTC
From: barcand@...
Topic: 13302 Message: 13312

I'll start my question with a statement - I love the Drake 2-B. It hears everything some of my other receivers hear, and some things others can't hear. So now, did Drake make any equivalently sensitive general coverage receivers?? If so, can someone make a model recommendation, please?
Would love to have something to look forward to adding to my "collection".
Thanks in advance.
73
Bernie in ND
WD0GMD

13313. Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 20:54:39 UTC
From: dohafisher
Topic: 13313 Message: 13313

Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.

Thanks
Doyle
KG$URF

13314. Re: [DrakeRadio] Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 22:13:29 UTC
From: Garey Barrell
Topic: 13313 Message: 13314

Doyle -

There is a very comprehensive tune up procedure in the manual for the T-4X. If you follow it, it will tune up fine.

Essentially what you have to do is start with the LOAD control at 0. Set the PLATE control to about 4. Preset the RF TUNE control in the band indicated for where you have the BAND SWITCHset. Set theGAIN control to about 10 o'clock.

Key the transmitter in TUNE, while watching the plate meter and adjust the RF TUNE to where the meter kicks up. It should peak in or very near the area marked onthe dial. Immediately adjust the PLATE control for MINIMUM on the meter. Unkey the transmitter. Wait a minute, then key it again, re peak the RF TUNE, and re-dip the PLATE. You can increase the LOAD control at this point, the meter will go up and again adjust the PLATE for MINIMUM. Keep going back and forth like this until increasing the LOADcontrol no longer increases the PLATE meter. This should be around 350 mA, and about 130W output on 40M if you have good PA tubes.

The ONE THING to remember about all that above is the FIRST and LAST thing you do is 'dip' the PLATE control (adjust for minmum on the PLATE meter). If at any time the meter does NOT 'dip' when the PLATE control is adjusted, un-key the transmitter immediately and find out why. Typical causes for this are 'wrong antenna', 'no antenna', 'bad antenna coax', and like that. Do not key again until you find out what's wrong. It's ok to key quickly and adjust PLATE quickly when you think you've found the problem, but be ready un-key immediately if still no 'dip'.

If you do this, your PA (6JB6) tubes will last for years. If you don't, they won't last out the week!!

If you don't have a manual, get one. My CD for the T-4X transmitter and R-4A receiver has high resolution PDFs of the original manuals along with a lot of other stuff you'll find very handy if you work on your radios. It costs less than many charge for a single print of one manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dohafisher wrote:
> Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.
>
> Thanks
> Doyle
> KG$URF
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

13315. Re: [DrakeRadio] Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-21 22:39:25 UTC
From: David Winfree
Topic: 13313 Message: 13315

Is the bias plate current set to 70mA?

On Sunday, April 21, 2013, dohafisher wrote:

> **
>
>
> Just got a T4X replaced the electrolyics and paper caps, new power supply
> kit from Paul Kraemer. My question, is there a quick and easy tune up
> prodecure? I haven't found where to preset the plate. I've went thru the
> prodecure in the manual but although I'm getting indications on the Drake
> meter, I have no output on my power meter. I think I'm just not getting it
> tuned up correctly. Any help or tips would be appreciated.
>
> Thanks
> Doyle
> KG$URF
>
>
>

[Non-text portions of this message have been removed]

13316. TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:09:34 UTC
From: Garey Barrell
Topic: 13316 Message: 13316

A week or so ago I posted about a failed PS-7 power supply. Four new pass transistors and on driver transistor resolved that problem, and the supply now puts out 13.75 VDC from zero to full load. This is the latest version (1980) supply with the SCR components on the PC board and the 0.22 cap across the transformer secondary. The TR-7 is also a fairly late one, 96xx something. The PA has the Version 2 Predriver with the MRF476.

I connected PS-7 to the TR-7 it was driving before, and everything came up as it should. However, (there's ALWAYS a 'however',) increasing the Carrier control results in about 100 watts out on five bands, but the ALC light never comes on and just about the time the wattmeter indicates 100W the power supply trips off. Turned off and back on, everything is the same, so I assume this is the small SCR in the regulator board firing for 'some' reason.

I know there has been a lot of discussion about these pieces, and I wonder what the consensus has been.

Stupid three-legged fuses......

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13317. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:19:58 UTC
From: Keith G3VKW
Topic: 13316 Message: 13317

Hi Gary,
It maybe a Duff MRF 475 on the predriver board, as that can suffer thermal runaway, and the transistor suffers,
This is perhaps the reason for the No ALC light.
re tripping out... that sounds more ominous, but that maybe due to the MRF 475 as well, just drawing too much current,
40m tends to be where they trip easiest.

FWIW
73
Keith G3VKW

From: Garey Barrell
Sent: Monday, April 22, 2013 6:09 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR-7 / PS-7 HELP!!

A week or so ago I posted about a failed PS-7 power supply. Four new pass transistors and on driver transistor resolved that problem, and the supply now puts out 13.75 VDC from zero to full load. This is the latest version (1980) supply with the SCR components on the PC board and the 0.22 cap across the transformer secondary. The TR-7 is also a fairly late one, 96xx something. The PA has the Version 2 Predriver with the MRF476.

I connected PS-7 to the TR-7 it was driving before, and everything came up as it should. However, (there's ALWAYS a 'however',) increasing the Carrier control results in about 100 watts out on five bands, but the ALC light never comes on and just about the time the wattmeter indicates 100W the power supply trips off. Turned off and back on, everything is the same, so I assume this is the small SCR in the regulator board firing for 'some' reason.

I know there has been a lot of discussion about these pieces, and I wonder what the consensus has been.

Stupid three-legged fuses......

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

[Non-text portions of this message have been removed]

13318. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:33:08 UTC
From: Garey Barrell
Topic: 13316 Message: 13318

Keith -

Are you referring to the MRF 476 on the predriver board? Seems like
I've seen something about degenerative feedback needed on that stage.
I need to do some more reading, but would rather discuss it with
someone who has been there. I guess 'lazy' could also be applicable
here! :-)

Thanks!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Keith G3VKW wrote:
> Hi Gary,
> It maybe a Duff MRF 475 on the predriver board, as that can suffer thermal runaway, and
the transistor suffers,
> This is perhaps the reason for the No ALC light.
> re tripping out... that sounds more ominous, but that maybe due to the MRF 475 as well,
just drawing too much current,
> 40m tends to be where they trip easiest.
>
> FWIW
> 73
> Keith G3VKW
>
>
>
> From: Garey Barrell
> Sent: Monday, April 22, 2013 6:09 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] TR-7 / PS-7 HELP!!
>
>
>
> A week or so ago I posted about a failed PS-7 power supply. Four new
> pass transistors and on driver transistor resolved that problem, and
> the supply now puts out 13.75 VDC from zero to full load. This is the
> latest version (1980) supply with the SCR components on the PC board
> and the 0.22 cap across the transformer secondary. The TR-7 is also a
> fairly late one, 96xx something. The PA has the Version 2 Predriver
> with the MRF476.

>
> I connected PS-7 to the TR-7 it was driving before, and everything
> came up as it should. However, (there's ALWAYS a 'however',)
> increasing the Carrier control results in about 100 watts out on five
> bands, but the ALC light never comes on and just about the time the
> wattmeter indicates 100W the power supply trips off. Turned off and
> back on, everything is the same, so I assume this is the small SCR in
> the regulator board firing for 'some' reason.
>
> I know there has been a lot of discussion about these pieces, and I
> wonder what the consensus has been.
>
> Stupid three-legged fuses......
>

13319. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:50:21 UTC
From: Don Cunningham
Topic: 13316 Message: 13319

Garey,

There is something "from the past" trying to come to the front of this old brain, but (and you are so right, there always is a "but") one question and a suggestion. Question is, did you try another TR7 (I assume all of us has more than one, HI) to see if it acts the same or "normal". Something is trying to tell me that those very small value emitter resistors on the pass transistors can cause this IF one or more opens??? It's been a LONG time since I have been into a PS-7, but I find them open on Astron supplies all the time.

I'll keep working on the "brain", but it's nearly shot at this point.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6264 - Release Date: 04/22/13

[Non-text portions of this message have been removed]

13320. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:51:18 UTC
From: Keith G3VKW
Topic: 13316 Message: 13320

Hi Gary,Yes the MRF476, I need my glasses!!
You lift the Emitter and add 3 resistors,in a parallel bunch, I think the write up is in the Drake Mods 6 document..
73
Keith

From: Garey Barrell
Sent: Monday, April 22, 2013 6:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Keith -

Are you referring to the MRF 476 on the predriver board? Seems like
I've seen something about degenerative feedback needed on that stage.
I need to do some more reading, but would rather discuss it with
someone who has been there. I guess 'lazy' could also be applicable
here! :-)

Thanks!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Keith G3VKW wrote:
> Hi Gary,
> It maybe a Duff MRF 475 on the predriver board, as that can suffer thermal runaway, and the transistor suffers,
> This is perhaps the reason for the No ALC light.
> re tripping out... that sounds more ominous, but that maybe due to the MRF 475 as well, just drawing too much current,
> 40m tends to be where they trip easiest.
>
> FWIW
> 73
> Keith G3VKW
>
>
>
> From: Garey Barrell
> Sent: Monday, April 22, 2013 6:09 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: [DrakeRadio] TR-7 / PS-7 HELP!!

>
>
>
> A week or so ago I posted about a failed PS-7 power supply. Four new
> pass transistors and on driver transistor resolved that problem, and
> the supply now puts out 13.75 VDC from zero to full load. This is the
> latest version (1980) supply with the SCR components on the PC board
> and the 0.22 cap across the transformer secondary. The TR-7 is also a
> fairly late one, 96xx something. The PA has the Version 2 Predriver
> with the MRF476.
>
> I connected PS-7 to the TR-7 it was driving before, and everything
> came up as it should. However, (there's ALWAYS a 'however',)
> increasing the Carrier control results in about 100 watts out on five
> bands, but the ALC light never comes on and just about the time the
> wattmeter indicates 100W the power supply trips off. Turned off and
> back on, everything is the same, so I assume this is the small SCR in
> the regulator board firing for 'some' reason.
>
> I know there has been a lot of discussion about these pieces, and I
> wonder what the consensus has been.
>
> Stupid three-legged fuses......
>

[Non-text portions of this message have been removed]

13321. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 17:51:46 UTC
From: Steve Wedge
Topic: 13316 Message: 13321

I've never worked on one of these, but linear supplies are pretty similar. How's the current-sensing resistor?

Most other supplies I've worked on over the years use a latching SCR circuit for overvoltage but this sounds like it's latching when the voltage is sagging.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, April 22, 2013 1:09 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR-7 / PS-7 HELP!!

A week or so ago I posted about a failed PS-7 power supply. Four new pass transistors and on driver transistor resolved that problem, and the supply now puts out 13.75 VDC from zero to full load. This is the latest version (1980) supply with the SCR components on the PC board and the 0.22 cap across the transformer secondary. The TR-7 is also a fairly late one, 96xx something. The PA has the Version 2 Predriver with the MRF476.

I connected PS-7 to the TR-7 it was driving before, and everything came up as it should. However, (there's ALWAYS a 'however',) increasing the Carrier control results in about 100 watts out on five bands, but the ALC light never comes on and just about the time the wattmeter indicates 100W the power supply trips off. Turned off and back on, everything is the same, so I assume this is the small SCR in the regulator board firing for 'some' reason.

I know there has been a lot of discussion about these pieces, and I wonder what the consensus has been.

Stupid three-legged fuses......

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

13322. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 20:55:41 UTC
From: Jim Shorney
Topic: 13316 Message: 13322

The MRF-476 is a good place to start. The emitter resistors mentioned by others as described in Drakemods should be done. It doesn't hurt. RF Parts has the transistors. The TR-7 PA rebuild article on WB4HFN's site is a good read, if you haven't already.

My TR-7 was acting all sorts of strange and wanting to take off due to leaky driver transistors on the PA board. You should have 0 volts on the base in RX mode. You know how to test those "fuses".... :)

73

-Jim
NU0C

On Mon, 22 Apr 2013 13:09:34 -0400, Garey Barrell wrote:

>
>A week or so ago I posted about a failed PS-7 power supply. Four new
>pass transistors and on driver transistor resolved that problem, and
>the supply now puts out 13.75 VDC from zero to full load. This is the
>latest version (1980) supply with the SCR components on the PC board
>and the 0.22 cap across the transformer secondary. The TR-7 is also a
>fairly late one, 96xx something. The PA has the Version 2 Predriver
>with the MRF476.
>
>I connected PS-7 to the TR-7 it was driving before, and everything
>came up as it should. However, (there's ALWAYS a 'however',)
>increasing the Carrier control results in about 100 watts out on five
>bands, but the ALC light never comes on and just about the time the
>wattmeter indicates 100W the power supply trips off. Turned off and
>back on, everything is the same, so I assume this is the small SCR in
>the regulator board firing for 'some' reason.
>
>I know there has been a lot of discussion about these pieces, and I
>wonder what the consensus has been.
>
>Stupid three-legged fuses......
>
>--
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>

>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13323. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-22 21:36:54 UTC
From: slowcountry1
Topic: 13108 Message: 13323

Garey,

One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.

One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.

RF tune peaks signals on all bands as I expect it should.

In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.

After repairing T7 and T9, section J alignment all peaks as I understand it should.

I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)

I have not been able to source an O-Scope yet.

At this point, I'm pretty much stuck in the mud.

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Progress!
>
> Have you checked the BAND oscillator? Swap V1. Do you get a strong
> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
> RF TUNE peak as it should? If you can't get a meter reading, you
> should be ableto hear the signal on an external receiver andtune for
> loudest signal to verify tuning. Do all the adjustments in Section
> VIII, para J peak as they should? Again if you can't get plate
> current, tune for max signal in an external receiver.
>
> The problem(s) have to be in this area. Did you get access to a
> scope? Makes these types of problems much easier to track down. You

> can compare the input and output of various stages to see if you have
> gain or perhaps loss onone or more bands. And be sure the
> BANDoscillatoris running strong on the higher bands.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
> >
> > I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
> >
> > With the selector switch in Cal, the S-Meter produces readings on the following bands;
> >
> > 80M S9+30
> > 40M S9+10
> > 20M S7
> > 15M S1
> > 10M no S reading change.
> >
> > The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
> >
> > I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
> >
> > Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
> >
> > Thanks for all of your help,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> It is not unusual for there to be caps and resistors inside
> >> transformers. I suppose if it's not marked it may be a bypass or no
> >> telling. I suspect what has happened is that someone tried to move it

> >> to CB and failed, and then either that person or someone else has
> >> tried to return it to stock.
> >>
> >> You can certainly mount the cap on the terminals on the outside of the
> >> transformer. There may be some coupling problems, but I doubt it.
> >> Certainly worth trying until you find the right one. Sometimes these
> >> caps are selected to account for variations in coil windings, plus
> >> ferrites were not nearly as consistent from batch to batch as they are
> >> today. Once you find a suitable value, I'd move it inside the can
> >> just to be safe. Be sure and use stable capacitors such as silver
> >> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> >> of pFs, but I could be wrong. If you are able to measure the existing
> >> cap it would give you a starting point.
> >>
> >> It's certainly possible that a model had a different layout, although
> >> I've not seen any significant variations. If you look in the
> >> 'Versions' directory, there are a couple of Drake photos of different
> >> models that may help determine if something is abnormal.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
> >>>
> >>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> >>>
> >>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
> >>>
> >>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> >>>
> >>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> >>>
> >>> Regards,

> >>>
> >>> Doug N9XTF
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> One other thing. Compare your repaired areas with the photos inthe
> >>>> CD. Some of the wiring, especially in the PA and CO area is
> >>>> critical. This is the best way to make sure everything is back where
> >>>> it should be!
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> Garey,
> >>>>>
> >>>>> Here is the work that I have done this week and their results. I have a number of
questions that will be included in the text.
> >>>>>
>

13324. Re: [DrakeRadio] 1N4007 as PIN Diode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 03:22:35 UTC
From: W6IDS
Topic: 13223 Message: 13324

Many thankyews!

Howard W6IDS

From: Chgypsy@...
Sent: Sunday, April 21, 2013 12:12 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 1N4007 as PIN Diode

There you go. Carl wd8nhk

mailto:w6ids%40frontier.com writes:

I'd be interested in the circuit as well.
http://www.k9ew.us/images/baqsk_tr_switch.jpg

Howard W6IDS Richmond, IN EM79NV

[Non-text portions of this message have been removed]

13325. Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 04:37:58 UTC
From: Jim Pruitt
Topic: 13325 Message: 13325

Can anyone tell me if there is a modern noise blanker for the TR7 or a circuit that would work? I know that the orginal is not considered that good by today's standards but I have not seen any homebrew ones or any homebrew circuits to use. I have 2 TR7's and would like to ad that option but not at the prices the NB7 and NB7A seem to command.

Thank you.

Jim Pruitt
WA7DUY

13326. Re: [DrakeRadio] Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 04:42:03 UTC
From: Jim Shorney
Topic: 13325 Message: 13326

Not good? Who says? Mine is downright amazing with they types of noise that it was designed for.

73

-Jim
NU0C

On Mon, 22 Apr 2013 21:37:58 -0700, Jim Pruitt wrote:

>Can anyone tell me if there is a modern noise blanker for the TR7 or a
>circuit that would work? I know that the orginal is not considered that
>good by today's standards but I have not seen any homebrew ones or any
>homebrew circuits to use. I have 2 TR7's and would like to ad that option
>but not at the prices the NB7 and NB7A seem to command.
>
>Thank you.
>
>Jim Pruitt
>WA7DUY
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13327. Re: [DrakeRadio] Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 05:27:59 UTC
From: Jim Pruitt
Topic: 13325 Message: 13327

Hi Jim.

What types of noise is it good with? The woodpecker? Does it work for static crashes or electric fence/thermostat/touch lights/power line noise/etc noise?

Great or not, it is really spendy so I was hoping there was a more modern circuit that could be homebrewed as I think an NB7 would be a bit much to homebrew today with at least a few parts obsolete. Yes I know, the life cycle of even a new recently released part is 6 months or less today so obsolete may or may not mean much but if the part is hard to find (or impossible) then the results are very iffy, at least for me and the projects I have tried from a bygone period.

Thank you.

Jim Pruitt

----- Original Message -----
From: Jim Shorney
To: DrakeRadio@yahoogroups.com
Sent: Monday, April 22, 2013 9:42 PM
Subject: Re: [DrakeRadio] Is there a modern TR7 noise blanker?

Not good? Who says? Mine is downright amazing with they types of noise that it
was designed for.

73

-Jim
NU0C

On Mon, 22 Apr 2013 21:37:58 -0700, Jim Pruitt wrote:

>Can anyone tell me if there is a modern noise blanker for the TR7 or a
>circuit that would work? I know that the orginal is not considered that
>good by today's standards but I have not seen any homebrew ones or any
>homebrew circuits to use. I have 2 TR7's and would like to ad that option
>but not at the prices the NB7 and NB7A seem to command.
>
>Thank you.
>
>Jim Pruitt
>WA7DUY
>

13328. Re: [DrakeRadio] TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 12:28:36 UTC
From: Chgypsy@...
Topic: 13328 Message: 13328

wa7duy@... writes:

What types of noise is it good with? The woodpecker? Does it work for static crashes or electric fence/thermostat/touch lights/power line noise/etc noise?

Guaranteed the woodpecker (major original design probability) , and power line noise from 200 feet away at my place.
Carl wd8nhk

[Non-text portions of this message have been removed]

13329. Drake 2NT Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 13:28:17 UTC
From: curtstamp
Topic: 13329 Message: 13329

Just picked up a couple of Drake 2NT Xmtrs that need some loving care. Think I have read it here but can't find the suggestions for cleaning the rust from the silver rings on the knobs. Also, does anyone have experience with using bathroom spray cleaners to clean up the copper chassis? Tnx in advance for your reply. [:)]

[Non-text portions of this message have been removed]

13330. Re: [DrakeRadio] Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 14:11:25 UTC
From: Don Cunningham
Topic: 13325 Message: 13330

Jim,

I do agree that the NB7 is VERY pricey, but it is the best for taking out my electric fence "popping" AND it does it with little to no distortion of the incoming signals, even if they are strong. All the "modern" noise blankers, even the very complex ones that are variable and even with "NB1 and NB2" presentations do distort greatly, especially when you are receiving strong signals on the band with the weak ones. I think the NB7's are much superior to the others I have on hand.

Now, noise reduction (labeled NR or DSP on modern receivers) is a very different animal, but these also distort at least the background so they are not clear like the NB7 on the same noise.

Just my .02. Probably not worth that much, hi.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6267 - Release Date: 04/23/13

[Non-text portions of this message have been removed]

13331. re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:08:38 UTC
From: curtstamp
Topic: 13331 Message: 13331

Does anyone have any suggestions for a small air compressor source to clean out the old circuits etc
in electronic equipment beside using the canned air sources? Are there any small air compressors that
would work for under $100? Tnx for your reply.

[Non-text portions of this message have been removed]

13332. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:15:35 UTC
From: Ethan Blanton
Topic: 13331 Message: 13332

curtstamp spake unto us the following wisdom:
> Does anyone have any suggestions for a small air compressor source to
> clean out the old circuits etc
> in electronic equipment beside using the canned air sources? Are there
> any small air compressors that
> would work for under $100? Tnx for your reply.

Most tool and home improvement stores sell small tool compressors (for nail guns and the like) with tiny 1-3 gallon tanks in this price range. I use such a compressor (mine happens to be a DeWalt out of compressor/nailer combo kit) for this duty. It's nice because it's small and can be easily carried either to the workbench or out in the driveway, depending on how filthy the item is, but it is quite loud and the 2 gallon tank depletes rapidly if the pressure regulator is wide open. The compressor, a shop vac, and a paintbrush constitute my "initial cleaning" of most electronic items.

Ethan

13333. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:29:23 UTC
From: Dan Galligan
Topic: 13331 Message: 13333

Falcon Products, puts out a product called "Dust-Off", that is a compressed gas canister, sold at Costco, I believe in a 6-pack. I haven't bought any in 4, or more years. But, I am on my last can, and will need to get more, soon. I think it costs under $20, for 6 aerosol cans.
I am including a quick photo of what my last can looks like, but I don't think the list allows the photo through, so I am cc: ing to you, personally.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:

> Does anyone have any suggestions for a small air compressor source to
> clean out the old circuits etc
> in electronic equipment beside using the canned air sources? Are there
> any small air compressors that
> would work for under $100? Tnx for your reply.
>
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[Non-text portions of this message have been removed]

13334. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:34:18 UTC
From: Dan Galligan
Topic: 13331 Message: 13334

I forgot to mention that the reason for this kind of compressed gas, rather than air, is due to lack of humidity. I realize that you want to avoid the canned stuff. I guess that is because of some being pretty ineffective. I've had that experience, too. The one I mentioned in the previous email, has served me well, for years.
I got in a hurry to hit the send button, before mentioning why I was recommending against your request.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:

> Does anyone have any suggestions for a small air compressor source to
> clean out the old circuits etc
> in electronic equipment beside using the canned air sources? Are there
> any small air compressors that
> would work for under $100? Tnx for your reply.
>
>
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[Non-text portions of this message have been removed]

13335. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:36:10 UTC
From: vacuuminded2@...
Topic: 13331 Message: 13335

Dan, you will be rather unpleasantly surprise when you go to buy another case of that stuff. The price of canned air has gone up dramatically in the past several years, partially due in part to the kids who huff the stuff in order to get a buzz.

Airheads.

Sent from my outdated iPhone wireless thingy

On Apr 23, 2013, at 3:29 PM, Dan Galligan <w3rxo@...> wrote:

> Falcon Products, puts out a product called "Dust-Off", that is a compressed gas canister, sold at Costco, I believe in a 6-pack. I haven't bought any in 4, or more years. But, I am on my last can, and will need to get more, soon. I think it costs under $20, for 6 aerosol cans.
> I am including a quick photo of what my last can looks like, but I don't think the list allows the photo through, so I am cc: ing to you, personally.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
>
> Sent from my iPad.
>
> On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:
>
> > Does anyone have any suggestions for a small air compressor source to
> > clean out the old circuits etc
> > in electronic equipment beside using the canned air sources? Are there
> > any small air compressors that
> > would work for under $100? Tnx for your reply.
> >
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> [Non-text portions of this message have been removed]
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>

[Non-text portions of this message have been removed]

13336. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:49:47 UTC
From: Charles Ring
Topic: 13331 Message: 13336

I do the opposite, using a shop vacuum hose and a small paintbrush.

On 4/23/2013 1634, Dan Galligan wrote:
>
> I forgot to mention that the reason for this kind of compressed gas,
> rather than air, is due to lack of humidity. I realize that you want
> to avoid the canned stuff. I guess that is because of some being
> pretty ineffective. I've had that experience, too. The one I mentioned
> in the previous email, has served me well, for years.
> I got in a hurry to hit the send button, before mentioning why I was
> recommending against your request.
>

[Non-text portions of this message have been removed]

13337. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 20:51:25 UTC
From: Dan Galligan
Topic: 13331 Message: 13337

Well, I won't blame the messenger for the message, but you just made my day go downhill, a bit, with hat news. It has been a while. I guess, when I set up my new shack and shop, at he Oklahoma house, I'll have to spring for a de-humidifier, for my Craftsman compressor. I thank you, for the otherwise bad news, and apologize, for making a poor recommendation.

My hand is extended, for the requisite "wrist-slap". Hi-Hi!!!

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 23, 2013, at 13:36, vacuuminded2@... wrote:

> Dan, you will be rather unpleasantly surprise when you go to buy another case of that stuff. The price of canned air has gone up dramatically in the past several years, partially due in part to the kids who huff the stuff in order to get a buzz.
>
> Airheads.
>
> Sent from my outdated iPhone wireless thingy
>
> On Apr 23, 2013, at 3:29 PM, Dan Galligan <w3rxo@...> wrote:
>
>> Falcon Products, puts out a product called "Dust-Off", that is a compressed gas canister, sold at Costco, I believe in a 6-pack. I haven't bought any in 4, or more years. But, I am on my last can, and will need to get more, soon. I think it costs under $20, for 6 aerosol cans.
>> I am including a quick photo of what my last can looks like, but I don't think the list allows the photo through, so I am cc: ing to you, personally.
>>
>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>>
>> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and

copper jacketed lead.
>>
>> Sent from my iPad.
>>
>> On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:
>>
>>> Does anyone have any suggestions for a small air compressor source to
>>> clean out the old circuits etc
>>> in electronic equipment beside using the canned air sources? Are there
>>> any small air compressors that
>>> would work for under $100? Tnx for your reply.
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13338. Re: [DrakeRadio] Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:13:25 UTC
From: Jim Shorney
Topic: 13325 Message: 13338

On Mon, 22 Apr 2013 22:27:59 -0700, Jim Pruitt wrote:

>What types of noise is it good with? The woodpecker? Does it work for
>static crashes or electric fence/thermostat/touch lights/power line
>noise/etc noise?

There's not much that does work on static crashes. A good DSP will help, but only to a point. The blankers in my TR-7 and R-7A are very effective on the intermittent power line noise that troubles my city location. They make the difference between an S-7 buzz saw and copying all but the very weakest of signals. Yes, with some distortion, but the alternative is not making the contact.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13339. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:17:29 UTC
From: Garey Barrell
Topic: 13316 Message: 13339

Jim -

Yeah, I had forgotten about the MRF476 Emitter degeneration. Sounds like a great place for a thick film SMD resistor.

My PS-7 problem has gotten worse. The tripping off at about 100W turns out to be an open current equalizer / current monitor0.18 ohm 15W resistor. I was able to adjust the current limit up to allow 150W output, but one of the 2N5302 pass transistors area of the heat sink wasn't getting warm! :-) Yet another hard to find item. I've found 0.18 ohms at 10W, (from Radio Shack no less,) which may be the best that I can do. There'd be about 7W at 25A load, so not too bad. It's also down against the chassis divider which should pull a little heat away.

The radio seems to be doing well, key down forseveral minutes and no heating of the MRF476 heatsink.

Nothin's ever easy....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> The MRF-476 is a good place to start. The emitter resistors mentioned by others
> as described in Drakemods should be done. It doesn't hurt. RF Parts has the
> transistors. The TR-7 PA rebuild article on WB4HFN's site is a good read, if
> you haven't already.
>
> My TR-7 was acting all sorts of strange and wanting to take off due to leaky
> driver transistors on the PA board. You should have 0 volts on the base in RX
> mode. You know how to test those "fuses".... :)
>
> 73
>
> -Jim
> NU0C
>
> On Mon, 22 Apr 2013 13:09:34 -0400, Garey Barrell wrote:
>
>> A week or so ago I posted about a failed PS-7 power supply. Four new
>> pass transistors and on driver transistor resolved that problem, and
>> the supply now puts out 13.75 VDC from zero to full load. This is the

>> latest version (1980) supply with the SCR components on the PC board
>> and the 0.22 cap across the transformer secondary. The TR-7 is also a
>> fairly late one, 96xx something. The PA has the Version 2 Predriver
>> with the MRF476.
>>
>> I connected PS-7 to the TR-7 it was driving before, and everything
>> came up as it should. However, (there's ALWAYS a 'however',)
>> increasing the Carrier control results in about 100 watts out on five
>> bands, but the ALC light never comes on and just about the time the
>> wattmeter indicates 100W the power supply trips off. Turned off and
>> back on, everything is the same, so I assume this is the small SCR in
>> the regulator board firing for 'some' reason.
>>
>> I know there has been a lot of discussion about these pieces, and I
>> wonder what the consensus has been.
>>
>> Stupid three-legged fuses......
>>
>> --
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>>
> --
> ?There?s something out of place ? let?s go and poke it with a stick.? ? The Doctor,
"Amy?s Choice"
>
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13340. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:20:19 UTC
From: Dan Galligan
Topic: 13331 Message: 13340

In attempt to redeem myself, from the earlier Faux Pas, I will send this, that I found. It looks like it would fit the bill. It has a nozzle for blowing, or can be used for airing up tires. Being 12VDC, you could likely wire it to your power supply, for any 12VDC rigs and accessories you may have near the bench.
http://www.amazon.com/Stop-Go-Mini-Air-Compressor/dp/B0033B7VPK/ref=sr_1_3?ie=UTF8&qid=1366751783&sr=8-3&keywords=mini+air+compressor

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:

> Does anyone have any suggestions for a small air compressor source to
> clean out the old circuits etc
> in electronic equipment beside using the canned air sources? Are there
> any small air compressors that
> would work for under $100? Tnx for your reply.
>
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[Non-text portions of this message have been removed]

13341. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:22:32 UTC
From: Garey Barrell
Topic: 13316 Message: 13341

Don -

Thanks for the tip. I was able to keep it from tripping by increasing the current limit setting, but sure enough the areaof the heat sink around one of the pass transistors was NOT warm after several minutes transmitting at 150W output.

Unfortunately, 0.18 ohm, 15W resistors ain't easy to find. The closest I could find was 0.18 ohms, 10W from Radio Shack! With 25A load, that's about 7W dissipation in one of those resistors, so 15W is 'right', but 10W will probably do. It will be hard up against the divider shield, so that should move some of the heataway. I do have a fan on the supply, so shouldn't be pushing things too far.

Onward and upward!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> There is something "from the past" trying to come to the front of this old brain, but (and you are so right, there always is a "but") one question and a suggestion. Question is, did you try another TR7 (I assume all of us has more than one, HI) to see if it acts the same or "normal". Something is trying to tell me that those very small value emitter resistors on the pass transistors can cause this IF one or more opens??? It's been a LONG time since I have been into a PS-7, but I find them open on Astron supplies all the time.
>
> I'll keep working on the "brain", but it's nearly shot at this point.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3272 / Virus Database: 3162/6264 - Release Date: 04/22/13
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13342. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:26:30 UTC
From: John Lawrence
Topic: 13331 Message: 13342

How about a shop vac, with the hose plugged into the exhaust.

John NE3E

On Tue, Apr 23, 2013 at 5:20 PM, Dan Galligan <w3rxo@...> wrote:

> **
>
>
> In attempt to redeem myself, from the earlier Faux Pas, I will send this,
> that I found. It looks like it would fit the bill. It has a nozzle for
> blowing, or can be used for airing up tires. Being 12VDC, you could likely
> wire it to your power supply, for any 12VDC rigs and accessories you may
> have near the bench.
>
> http://www.amazon.com/Stop-Go-Mini-Air-Compressor/dp/B0033B7VPK/ref=sr_1_3?ie=UTF8&qid=1
366751783&sr=8-3&keywords=mini+air+compressor
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest in
> precious metals, like platinum, gold and silver. Personally, I choose to
> invest in blued steel, brass, and copper jacketed lead.
>
> Sent from my iPad.
>
> On Apr 23, 2013, at 13:08, curtstamp <Curtstamp@...> wrote:
>
> > Does anyone have any suggestions for a small air compressor source to
> > clean out the old circuits etc
> > in electronic equipment beside using the canned air sources? Are there
> > any small air compressors that
> > would work for under $100? Tnx for your reply.
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> [Non-text portions of this message have been removed]
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--
John

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13343. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:28:51 UTC
From: Ethan Blanton
Topic: 13331 Message: 13343

Dan Galligan spake unto us the following wisdom:
> In attempt to redeem myself, from the earlier Faux Pas, I will send
> this, that I found. It looks like it would fit the bill. It has a
> nozzle for blowing, or can be used for airing up tires. Being 12VDC,
> you could likely wire it to your power supply, for any 12VDC rigs and
> accessories you may have near the bench.

My experience with those 12V compressors is that the volume of air they produce is not nearly sufficient for things like cleaning. They take a minute or two to inflate a car tire to 35 PSI from 30 PSI. They normally say they're capable of 100+ PSI, but I assume that is the ultimate pressure they will develop in an infinitely small pressure vessel just before heat death of the universe.

Ethan

13344. Re: [DrakeRadio] Drake 2NT Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:44:52 UTC
From: Chgypsy@...
Topic: 13329 Message: 13344

Hello Curt,

Curtstamp@... writes:
snips.....

Also, does anyone have experience with using bathroom spray cleaners to
clean up the copper
chassis? Tnx in advance for your reply. [:)]
I do not, however the copper chassis may be the typical Drake copper
coating and it is thin. Can also picture what ever you use taking off any print
on the chassis fwiw. Good luck, Carl wd8nhk

[Non-text portions of this message have been removed]

13345. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:51:26 UTC
From: William Houghton
Topic: 13331 Message: 13345

Dan is correct that using a compressor will usually result in moisture mixed with the air. This is a problem when I use my compressor to do sandblasting. Fortunately there is an attachment called a water separator that seems to do the trick.

For vacuuming of a chassis I bought a micro vacuum attachment kit from Harbor Freight, p/n 32994. The extension and brush tubes are about 3/8 inch in diameter and these can get into pretty small spaces. The tubes have a tendency to not stay together so I keep a roll of blue painters tape handy. The adapter to a "standard" vacuum hose only fit one of the vacs in my house. Most woodworking supply houses, and maybe Home Depot, have a rubber mutli-stepped hose adapter that can be used to adapter many hose combinations.

From: Ethan Blanton <ethan.blanton@...>
To: DrakeRadio@yahoogroups.com
Sent: Tue, April 23, 2013 1:15:43 PM
Subject: Re: [DrakeRadio] re: Suggestioins for air source for cleaning

curtstamp spake unto us the following wisdom:
> Does anyone have any suggestions for a small air compressor source to
> clean out the old circuits etc
> in electronic equipment beside using the canned air sources? Are there
> any small air compressors that
> would work for under $100? Tnx for your reply.

Most tool and home improvement stores sell small tool compressors (for nail guns and the like) with tiny 1-3 gallon tanks in this price range. I use such a compressor (mine happens to be a DeWalt out of compressor/nailer combo kit) for this duty. It's nice because it's small and can be easily carried either to the workbench or out in the driveway, depending on how filthy the item is, but it is quite loud and the 2 gallon tank depletes rapidly if the pressure regulator is wide open. The compressor, a shop vac, and a paintbrush constitute my "initial cleaning" of most electronic items.

Ethan

[Non-text portions of this message have been removed]

13346. RE: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 21:52:59 UTC
From: John Pelham
Topic: 13331 Message: 13346

I use this

http://www.amazon.com/Metro-Vacuum-ED500-500-Watt-Electric/dp/B001J4ZOAW/ref=sr_1_1?ie=UTF8 <http://www.amazon.com/Metro-Vacuum-ED500-500-Watt-Electric/dp/B001J4ZOAW/ref=sr_1_1?ie=UTF8&qid=1366753836> &qid=1366753836

Metro Vacuum ED500 DataVac 500-Watt 0.75-HP Electric Duster 120-Volt

It works great for me.

73,

John, W1JA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of curtstamp
Sent: Tuesday, 23 April 2013 4:09 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] re: Suggestioins for air source for cleaning

Does anyone have any suggestions for a small air compressor source to
clean out the old circuits etc
in electronic equipment beside using the canned air sources? Are there
any small air compressors that
would work for under $100? Tnx for your reply.

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[Non-text portions of this message have been removed]

13347. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 22:53:04 UTC
From: Don Cunningham
Topic: 13316 Message: 13347

You are welcome, Garey!! Glad to be able to "give back" for once. Those equalizing resistors have bitten me more than once. And, when we are not building many of these supplies, those low value resistors are VERY hard to find. If Radio Shack doesn't work out, I may have a spare or two. Let us know.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6268 - Release Date: 04/23/13

[Non-text portions of this message have been removed]

13348. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 23:37:35 UTC
From: Steve Wedge
Topic: 13331 Message: 13348

Curt:

Two words: Harbor Freight.

or, another two-word answer: Northern Tool.

Both have inexpensive "hotdog" compressors that would do the job.

I tend to run the pressure at about 50 - 60 psi when blowing out dust or drying out a washed chassis.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: curtstamp
Sent: Tuesday, April 23, 2013 4:08 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] re: Suggestioins for air source for cleaning

Does anyone have any suggestions for a small air compressor source to
clean out the old circuits etc
in electronic equipment beside using the canned air sources? Are there
any small air compressors that
would work for under $100? Tnx for your reply.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13349. Re: Drake 2NT Knobs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-23 23:44:21 UTC
From: qrpcwop
Topic: 13329 Message: 13349

Curt

I recently started restoring a 2B, and found info about the knobs here:

http://www.mail-archive.com/drakelist@.../msg07114.html

Actually, I got lucky - the knobs weren't rusty, just well-coated with nicotine. They cleaned up very nicely after a good soak.

Also, I've found that household cleaners don't do much for restoring the finish of the chassis, they only clean the crud off. I'm hesitant to use any low-abrasion copper cleaner, as it's most likely to remove the tube markings as well.

73 - Al, K2ZN

13350. Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 00:00:48 UTC
From: qrpcwop
Topic: 13325 Message: 13350

I've got to agree with Jim; I've found the TR-7 NB to be very effective, probably one of the better implementations I've ever used. Even many late-production analog blankers leave a lot to be desired.

Excellent noise blanking can be achieved with software-defined receivers, or receivers that have a DSP last IF, but it has to be inside the AGC loop - something you won't be able to accomplish with a DSP filter that connects to the AF output.

73 - Al, K2ZN

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
> There's not much that does work on static crashes. A good DSP will help, but
> only to a point. The blankers in my TR-7 and R-7A are very effective on the
> intermittent power line noise that troubles my city location. They make the
> difference between an S-7 buzz saw and copying all but the very weakest of
> signals. Yes, with some distortion, but the alternative is not making the
> contact.

13351. Re: [DrakeRadio] TR-7 / PS-7 HELP!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 00:24:01 UTC
From: Jim Shorney
Topic: 13316 Message: 13351

On Tue, 23 Apr 2013 17:17:29 -0400, Garey Barrell wrote:

>Yeah, I had forgotten about the MRF476 Emitter degeneration. Sounds
>like a great place for a thick film SMD resistor.

If you find a suitable part, order a bunch. :) I'll take a few off your hands.
I really didn't much like the bundle of "conventional" resistors.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"

13352. TR-7, INRAD Filter (1.8), TR7 VFO module

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 00:51:28 UTC
From: W7VH
Topic: 13352 Message: 13352

Hi,

I ended up with two TR-7's, one with the DDS VFO and
one stock. I'd like to sell the stock TR-7 (S/N 1275).
it comes with the Drake hand mic and a power pole <->
radio power adapter for use with a 12V supply.
It functions perfectly. It's very clean cosmetically
except for a couple of scratches and paint oxidation on the right side. I have pictures.

I also have a nice used once (in my other TR-7)
INRAD 1.8khz SSB filter as well as the VFO module
that was replaced by the DDS.

Does anyone have an opinion on what I should ask for this stuff?

If you're interested contact me offline.

Thanks,

Jon
W7VH

13353. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 01:45:30 UTC
From: el34guy@...
Topic: 13325 Message: 13353

I've been using the BHI dsp noise reduction on my tr7 and its quite good. Really like it so far, I haven't had it too long actually. I have it wired right into the speaker. I'd say its another noise reducer that actually works!

73
Mark
W0NCL

-----Original Message-----
From: qrpcwop <k2zn@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Apr 23, 2013 7:00 pm
Subject: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

I've got to agree with Jim; I've found the TR-7 NB to be very effective, probably one of the better implementations I've ever used. Even many late-production analog blankers leave a lot to be desired.

Excellent noise blanking can be achieved with software-defined receivers, or receivers that have a DSP last IF, but it has to be inside the AGC loop - something you won't be able to accomplish with a DSP filter that connects to the AF output.

73 - Al, K2ZN

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
> There's not much that does work on static crashes. A good DSP will help, but
> only to a point. The blankers in my TR-7 and R-7A are very effective on the
> intermittent power line noise that troubles my city location. They make the
> difference between an S-7 buzz saw and copying all but the very weakest of
> signals. Yes, with some distortion, but the alternative is not making the
> contact.

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13354. Re: [DrakeRadio] re: Suggestioins for air source for cleaning

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 02:22:50 UTC
From: Charles Ring
Topic: 13331 Message: 13354

To clarify, I use the shop vac as a vacuum, not as a blower. A small paintbrush gets the dirt loose and the vacuum hose sucks it up very well. No added moisture and no dirt scattered everywhere. I've done it this way for 30+ years on all sorts of electronics from broadcast transmitters to computers. I have a blower but the main use it gets is to clean the shop vac's filter outdoors.

73 de W3NU

On 4/23/2013 1649, Charles Ring wrote:
>
> I do the opposite, using a shop vacuum hose and a small paintbrush.
>
> On 4/23/2013 1634, Dan Galligan wrote:
> >
> > I forgot to mention that the reason for this kind of compressed gas,
> > rather than air, is due to lack of humidity. I realize that you want
> > to avoid the canned stuff. I guess that is because of some being
> > pretty ineffective. I've had that experience, too. The one I mentioned
> > in the previous email, has served me well, for years.
> > I got in a hurry to hit the send button, before mentioning why I was
> > recommending against your request.
> >
>

[Non-text portions of this message have been removed]

13355. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 02:28:42 UTC
From: Jim Shorney
Topic: 13325 Message: 13355

I have a Clearspeech Base that I use with the 7-line. It doesn't do anything for the buzz saw, but with atmospherics, system noise (hiss), and static crashes it ranges anywhere from mediocre to amazing. I sometimes use it in conjunction with a classic Autek QF-1A. I recently acquired a gadget called a Jabco Voice Gate that may prove interesting, but likely will not add much to the overall system.

73

-Jim
NU0C

On Tue, 23 Apr 2013 21:45:30 -0400 (EDT), el34guy@... wrote:

>I've been using the BHI dsp noise reduction on my tr7 and its quite good. Really like it so far, I haven't had it too long actually. I have it wired right into the speaker. I'd say its another noise reducer that actually works!

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

13356. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 03:24:29 UTC
From: Bernie
Topic: 13325 Message: 13356

Jim,

That's the same setup I use...an Autek QF-1A and a Clear Speech Base Unit. The Clear Speech drops the noise floor by at least a full S unit, and with the single or double notch on the Autek, plus any audio manipulators I have on whatever rig I'm running, it makes any old rig sound like a new multi-thousand dollar radio. I can't remember which of the units I have in-line first, one feeds the other, then the output is sent to a 10 inch 8 ohm speaker. I can run several radios this way by simply having an input presence on a patch panel into the audio chain, and from there, use a long cord with a 1/4 inch plug on one end and plug it into any headphone jack in any receiver. It even improves the old Drake 2-B!!

You're the only other ham I've known that also uses the Clear Speech - Autek set-up. To really dig deep, I simply plug in headphones instead of the 10 inch speaker.

Happy hamming!!

73

Bernie in ND
WD0GMD

----- Original Message -----
From: Jim Shorney
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, April 23, 2013 9:28 PM
Subject: Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

I have a Clearspeech Base that I use with the 7-line. It doesn't do anything for the buzz saw, but with atmospherics, system noise (hiss), and static crashes it ranges anywhere from mediocre to amazing. I sometimes use it in conjunction with a classic Autek QF-1A. I recently acquired a gadget called a Jabco Voice Gate that may prove interesting, but likely will not add much to the overall system.

73

-Jim
NU0C

On Tue, 23 Apr 2013 21:45:30 -0400 (EDT), el34guy@... wrote:

>I've been using the BHI dsp noise reduction on my tr7 and its quite good. Really like it so far, I haven't had it too long actually. I have it wired right into the speaker. I'd say its another noise reducer that actually works!

--

"A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"

[Non-text portions of this message have been removed]

13357. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 04:35:24 UTC
From: Jim Shorney
Topic: 13325 Message: 13357

Bernie,

I'm sure you mean "relative" S-Units, since the Clearspeech is in the audio chain... :) Yes, it can be quite effective. I have the QF-1A feeding the Clearspeech. Sometimes a little pre-tailoring of the audio helps the DSP cope with the noise. The Jabco I picked up looks like it mostly duplicates the functions of the QF-1A, but it has a variable noise gate (squelch) with blending capability (to let a little of the nosie through if desired), and an audio expander. I'm really interested in what the expander portion can do. Never tried one on a radio. It also has the quaint ability to feed a tape recorder and trigger the recording via the noise gate. With the capabilities available in today's computer recording software, that's probably enhanced uselessness, but there is still a bit of a cool factor there. I had never seen or heard of one of these things until I spotted this lonely sample on that auction site, with no bidders. I was able to contact the guy who built them through his web site and he sent me an electronic copy of the manaul.

http://www.studiorite.com/oldindex/imt.html

73

-Jim
NU0C

On Tue, 23 Apr 2013 22:24:29 -0500, Bernie wrote:

>Jim,
>
>That's the same setup I use...an Autek QF-1A and a Clear Speech Base Unit. The Clear Speech drops the noise floor by at least a full S unit, and with the single or double notch on the Autek, plus any audio manipulators I have on whatever rig I'm running, it makes any old rig sound like a new multi-thousand dollar radio. I can't remember which of the units I have in-line first, one feeds the other, then the output is sent to a 10 inch 8 ohm speaker. I can run several radios this way by simply having an input presence on a patch panel into the audio chain, and from there, use a long cord with a 1/4 inch plug on one end and plug it into any headphone jack in any receiver. It even improves the old Drake 2-B!!
>
>You're the only other ham I've known that also uses the Clear Speech - Autek set-up. To really dig deep, I simply plug in headphones instead of the 10 inch speaker.
>
>Happy hamming!!
>
>73
>
>Bernie in ND
>WD0GMD

>
>
> ----- Original Message -----
> From: Jim Shorney
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, April 23, 2013 9:28 PM
> Subject: Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?
>
>
>
>
> I have a Clearspeech Base that I use with the 7-line. It doesn't do anything
> for the buzz saw, but with atmospherics, system noise (hiss), and static
> crashes it ranges anywhere from mediocre to amazing. I sometimes use it in
> conjunction with a classic Autek QF-1A. I recently acquired a gadget called a
> Jabco Voice Gate that may prove interesting, but likely will not add much to
> the overall system.
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> On Tue, 23 Apr 2013 21:45:30 -0400 (EDT), el34guy@... wrote:
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> "A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"
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>
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>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13358. Re: [DrakeRadio] My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 05:12:18 UTC
From: Howard Traxler
Topic: 12538 Message: 13358

Hello again Garey,

Finally got the XYL down there to watch the meter while I fired up the TR-4 as you suggested. I think she's getting a bit tired of my TR-4. Wish I could find an effective way to check it myself.

In any case, setting it up as you say (below), listening on a nearby receiver, there is a signal increase when I move the RF Tune and Plate Tune and not so much when I increase the drive gain. Plate current does not rise from the 100 ma biased point.

Does that give you any ideas what to check next? Will the xmtr not working cause the rcvr to not work? That's the first thing I noticed; the receiver went dead

Thanks, Garey.

73,
Howard, WA9RYF
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 09, 2013 1:17 PM
Subject: Re: [DrakeRadio] My non-working TR-4

> Howard -
>
> I have several of these 'projects' going. Need to refresh a couple of
> things.
>
> Are you able to set the PA idle current to 0.1A?
>
> Under test conditions:
>
> 7.000 MHz
> Mode SSB
> LSB
> RF TUNE around 12 o'clock +/- 2 (adjust for peak)
> GAIN 0
> PTT closed
> KEY either unplugged or closed
> PLATE and LOAD adjust for peak.
>
> Plate current should show 0.1A (idle current)
>
> Increase GAIN while 'watching' PLATE current. Signal strength should
> increase with GAIN, and PLATE current should be 'dipped' with PLATE
> control.

>
> IF PLATE current does NOT increase whenGAIN is increased we have a
> problem. If PLATE current increases but output does NOT, then check
> your power meter!
>
> The slide switch on the rear panel only dims the panel lamps for
> night-time / mobile use.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
>> Garey,
>>
>> Further results from testing:
>> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load
>>
>> R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic connection. Not enough output to register on my relative power out squawker (I use for tuning).
>>
>> TR-4 still doesn't receive when connected to antenna.
>>
>> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>>
>> Thanks, Garey
>>
>> 73
>> Howard, WA9RYF
>>
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>> Yahoo! Groups Links
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13359. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 13:26:13 UTC
From: Bernie
Topic: 13325 Message: 13359

Thanks, Jim...

73

Bernie in ND
WD0GMD

----- Original Message -----
From: Jim Shorney
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, April 23, 2013 11:35 PM
Subject: Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Bernie,

I'm sure you mean "relative" S-Units, since the Clearspeech is in the audio chain... :) Yes, it can be quite effective. I have the QF-1A feeding the Clearspeech. Sometimes a little pre-tailoring of the audio helps the DSP cope with the noise. The Jabco I picked up looks like it mostly duplicates the functions of the QF-1A, but it has a variable noise gate (squelch) with blending capability (to let a little of the nosie through if desired), and an audio expander. I'm really interested in what the expander portion can do. Never tried one on a radio. It also has the quaint ability to feed a tape recorder and trigger the recording via the noise gate. With the capabilities available in today's computer recording software, that's probably enhanced uselessness, but there is still a bit of a cool factor there. I had never seen or heard of one of these things until I spotted this lonely sample on that auction site, with no bidders. I was able to contact the guy who built them through his web site and he sent me an electronic copy of the manaul.

http://www.studiorite.com/oldindex/imt.html

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-Jim
NU0C

On Tue, 23 Apr 2013 22:24:29 -0500, Bernie wrote:

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>Happy hamming!!
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>
>Bernie in ND
>WD0GMD
>
>
> ----- Original Message -----
> From: Jim Shorney
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, April 23, 2013 9:28 PM
> Subject: Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?
>
>
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> -Jim
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>
> >I've been using the BHI dsp noise reduction on my tr7 and its quite good. Really like it so far, I haven't had it too long actually. I have it wired right into the speaker. I'd say its another noise reducer that actually works!
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> "A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"
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>
>[Non-text portions of this message have been removed]

>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

13360. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 15:09:02 UTC
From: Garey Barrell
Topic: 13325 Message: 13360

Guys -

I remember going to Dayton around 1991 where a couple of guys had a
booth inside the main hall. They were introducing a little black and
white box that was something called a 'DSP filter'. They had a bunch
of recordings of various band conditions, SSB and CW, lot of noise,
QRM, etc., etc. Then they would push one or more buttons on the 'box'
and the garbage went away! Pushthe button again, it was noisy and
almost unintelligible again. The most impressive trick was another
button that was pushed when there was a heterodyne tone nearby. Push
the button, the tone disappears!! Notuning, no 'notching', just GONE!
After three or four cycles of this on SSB and CW, the crowd around the
booth couldn't pull their money out fast enough!! This was the DSP-9
from Timewave, and I believe was sold at $220.

The DSP-9+, DSP-59 and DSP-59+ came along in due course, and I got a
DSP-59+ when it was introduced a year or so later, and still have it.
The 59 used the same DSP set, but had more controls and buttons,
giving more flexibility inbandwidths, noise reduction amount, etc.,
plus an RTTY regeneration feature that was very powerful. It took a
noisy RTTY signal, cleaned it up, and then keyed an internal tone
generator to output the 'clean' RTTY signal.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Bernie,
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> chain... :) Yes, it can be quite effective. I have the QF-1A feeding the
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> 73
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> -Jim
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>> Happy hamming!!
>>
>> 73
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>> ----- Original Message -----
>> From: Jim Shorney
>> To: DrakeRadio@yahoogroups.com
>> Sent: Tuesday, April 23, 2013 9:28 PM
>> Subject: Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?
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>> "A deep understanding of reality is exactly the same thing as laziness." - Wally, "Dilbert"
>>
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>>
>> [Non-text portions of this message have been removed]
>>
>>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
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> http://www.nebraskaghosts.org
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>
> Yahoo! Groups Links
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13361. Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 15:40:45 UTC
From: afb7duy
Topic: 13325 Message: 13361

Hello Don.

It might be true that the NB7 is and was a great noise blanker but I see very few come up for sale and seldom when I have the money to buy them. Even then I have only seen them on ebay and they seem to go for a lot more money there than I am willing to pay. That is what prompted the question as I do not mind building something and actually prefer that option but I have not seen anything about building an NB7 or clone but have seen K8AC's version of the Aux7. It looked like just building an NB7 from scratch might be a bit hard with some parts no longer readily available and that was what prompted the question. I have one rig that has noise blankers in it and absolutely hate it because it distorts very badly but find that I do often need something since I get electric fence noise or steady buzz from some touch lamp or doorbell transformer or similar and neither of my TR7's have noise blankers. So I am on a quest to find something.

Thank you.

Jim Pruitt

--- In DrakeRadio@yahoogroups.com, "Don Cunningham" <donc@...> wrote:
>
> Jim,
>
> I do agree that the NB7 is VERY pricey, but it is the best for taking out my electric fence "popping" AND it does it with little to no distortion of the incoming signals, even if they are strong. All the "modern" noise blankers, even the very complex ones that are variable and even with "NB1 and NB2" presentations do distort greatly, especially when you are receiving strong signals on the band with the weak ones. I think the NB7's are much superior to the others I have on hand.
>
> Now, noise reduction (labeled NR or DSP on modern receivers) is a very different animal, but these also distort at least the background so they are not clear like the NB7 on the same noise.
>
> Just my .02. Probably not worth that much, hi.
> 73,
> Don, WB5HAK
>

13362. Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 15:55:46 UTC
From: afb7duy
Topic: 13325 Message: 13362

Jim,

Do you happen to have a schematic for the Clearspeech? I bought one some time back that does not work. Heil never made that info avialable and then reviews said that someone else makes it now but neither let the schematic out.

I had also thought about the BHI as I think QST had some article 2 or 3 years ago that used the module in something else but again even that module was not cheap.

Thank you.

Jim Pruitt

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
>
> I have a Clearspeech Base that I use with the 7-line. It doesn't do anything
> for the buzz saw, but with atmospherics, system noise (hiss), and static
> crashes it ranges anywhere from mediocre to amazing. I sometimes use it in
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13363. Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 16:01:49 UTC
From: afb7duy
Topic: 13302 Message: 13363

Hello Bernie.

I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.

Good luck with your quest.

Jim Pruitt
WA7DUY

--- In DrakeRadio@yahoogroups.com, barcand@... wrote:
>
>
> I'll start my question with a statement - I love the Drake 2-B. It hears
> everything some of my other receivers hear, and some things others can't
> hear. So now, did Drake make any equivalently sensitive general coverage
> receivers?? If so, can someone make a model recommendation, please?
> Would love to have something to look forward to adding to my "collection".
> Thanks in advance.
> 73
> Bernie in ND
> WD0GMD
>

13364. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 18:18:36 UTC
From: Bernie
Topic: 13302 Message: 13364

Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit. Thankls for the suggestions.
73

Bernie in ND
WD0GMD

----- Original Message -----
From: afb7duy
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 24, 2013 11:01 AM
Subject: [DrakeRadio] Re: General Coverage Receiver

Hello Bernie.

I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.

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> WD0GMD
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[Non-text portions of this message have been removed]

13365. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 19:31:22 UTC
From: Garey Barrell
Topic: 13302 Message: 13365

Bernie -

I would suggest going for an R-4A rather than the R-4. Several improvements were made between the two.

The early R-4A (s/n <4000) is on my early A-Line CD and changed from a tube PTO to solid state. The late R-4 added a VR tube, but I don't know at what s/n. There were about 2000 each made of the R-4 and early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each converted a few more stages from tube to transistor but even the Version 3 of the R-4B was still all tube through the RF, IF and AF Output. TheProduct Detector and AF Preamp stages are tube through the Early R-4A.

ALL are functionally identical, with an identical block diagram. Changes from the Late R-4A to the R-4B are primarily cosmetic and refinements..

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
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> Bernie in ND
> WD0GMD
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> ----- Original Message -----
> From: afb7duy
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, April 24, 2013 11:01 AM
> Subject: [DrakeRadio] Re: General Coverage Receiver
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> > hear. So now, did Drake make any equivalently sensitive general coverage
> > receivers?? If so, can someone make a model recommendation, please?
> > Would love to have something to look forward to adding to my "collection".
> > Thanks in advance.
> > 73
> > Bernie in ND
> > WD0GMD
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13366. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:10:45 UTC
From: barcand@...
Topic: 13302 Message: 13366

Thank you, Garey. Much appreciated. 73

Bernie in ND
WD0GMD

On Wed, April 24, 2013 2:31 pm, Garey Barrell wrote:
> Bernie -
>
> I would suggest going for an R-4A rather than the R-4. Several
> improvements were made between the two.
>
> The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
> tube PTO to solid state. The late R-4 added a VR tube, but I don't
> know at what s/n. There were about 2000 each made of the R-4 and
> early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
> converted a few more stages from tube to transistor but even the
> Version 3 of the R-4B was still all tube through the RF, IF and AF
> Output. TheProduct Detector and AF Preamp stages are tube through the
> Early R-4A.
>
> ALL are functionally identical, with an identical block diagram.
> Changes from the Late R-4A to the R-4B are primarily cosmetic and
> refinements..
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Bernie wrote:
>> Thanks, Jim. Would love to have an early R-4. Will look it up and study
>> it a bit. Thankls for the suggestions.
>> 73
>>
>> Bernie in ND
>> WD0GMD
>>
>>
>> ----- Original Message -----
>> From: afb7duy
>> To: DrakeRadio@yahoogroups.com
>> Sent: Wednesday, April 24, 2013 11:01 AM
>> Subject: [DrakeRadio] Re: General Coverage Receiver

>>
>>
>>
>> Hello Bernie.
>>
>> I did not see a reply to you so I will start the ball rolling. My
>> suggestion would be to acquire a Drake R4 (any) although the R4B
>> would be the best choice as you did not need other filters. The SPR4
>> would also be an alternative since it was supposed to be the solid
>> state equivalent of the R4A, B, and C. You would need to either get
>> an FS4 or get several various band crystals for the various shortwave
>> bands you want to listen to or get the FS4 or one of the DDS
>> generators with amplifier to simulate the FS4. I originally got my
>> R4B because I loved to listen to shortwave broadcasts and also wanted
>> a receiver that covered the weird frequencies that the mars program I
>> am in uses and alwork as a ham band receiver.
>>
>> Good luck with your quest.
>>
>> Jim Pruitt
>> WA7DUY
>>
>> --- In DrakeRadio@yahoogroups.com, barcand@... wrote:
>> >
>> >
>> > I'll start my question with a statement - I love the Drake 2-B. It
>> hears
>> > everything some of my other receivers hear, and some things others
>> can't
>> > hear. So now, did Drake make any equivalently sensitive general
>> coverage
>> > receivers?? If so, can someone make a model recommendation, please?
>> > Would love to have something to look forward to adding to my
>> "collection".
>> > Thanks in advance.
>> > 73
>> > Bernie in ND
>> > WD0GMD
>> >
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>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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13367. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:34:57 UTC
From: Tim Kass
Topic: 13302 Message: 13367

I would also recommend the R4B over the other R4any..nothing to add but they have become expensive...the 11 tube version of the R4A is nearly the same as the R4B .. earlier R4A had 13 tubes... but there are variations even among the R4B units as well. Hard to find the correct schematic for the right R4B unit I had. A possible Drake sleeper is the SW-4A .. AM only, but I consider it a R4 (lite) .. looks just like an R4, same tube line up in the RF and IF sections...good sensitivity and 5kz crystal filter for AM making broadcast stations sound great. It has a bit more audio out than the R4's, has
3 watts versus 1.5 watts.

Either way, you wont lose any money on these radios, I've owned about 20 of them over the years.

73, Tim K8WBL

--- On Wed, 4/24/13, Bernie <barcand@...> wrote:

From: Bernie <barcand@...>
Subject: Re: [DrakeRadio] Re: General Coverage Receiver
To: DrakeRadio@yahoogroups.com
Date: Wednesday, April 24, 2013, 2:18 PM

Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit. Thankls for the suggestions.
73

Bernie in ND
WD0GMD

----- Original Message -----
From: afb7duy
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, April 24, 2013 11:01 AM
Subject: [DrakeRadio] Re: General Coverage Receiver

Hello Bernie.

I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.

Good luck with your quest.

Jim Pruitt
WA7DUY

--- In DrakeRadio@yahoogroups.com, barcand@... wrote:
>
>
> I'll start my question with a statement - I love the Drake 2-B. It hears
> everything some of my other receivers hear, and some things others can't
> hear. So now, did Drake make any equivalently sensitive general coverage
> receivers?? If so, can someone make a model recommendation, please?
> Would love to have something to look forward to adding to my "collection".
> Thanks in advance.
> 73
> Bernie in ND
> WD0GMD
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13368. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:42:09 UTC
From: Garey Barrell
Topic: 13302 Message: 13368

Tim -

There were two versions each of the R-4, two versions ofthe Early
R-4A, Two versions of the Late R-4A andthree versions of the R-4B.
All versions are on the appropriate Service supplement CDs.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Tim Kass wrote:
> I would also recommend the R4B over the other R4any..nothing to add but they have become expensive...the 11 tube version of the R4A is nearly the same as the R4B .. earlier R4A had 13 tubes... but there are variations even among the R4B units as well. Hard to find the correct schematic for the right R4B unit I had. A possible Drake sleeper is the SW-4A .. AM only, but I consider it a R4 (lite) .. looks just like an R4, same tube line up in the RF and IF sections...good sensitivity and 5kz crystal filter for AM making broadcast stations sound great. It has a bit more audio out than the R4's, has
> 3 watts versus 1.5 watts.
>
> Either way, you wont lose any money on these radios, I've owned about 20 of them over the years.
>
> 73, Tim K8WBL
>
>
> --- On Wed, 4/24/13, Bernie <barcand@...> wrote:
>
>
> From: Bernie <barcand@...>
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
> To: DrakeRadio@yahoogroups.com
> Date: Wednesday, April 24, 2013, 2:18 PM
>
>
>
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>
>
> Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit. Thankls for the suggestions.
> 73

>
> Bernie in ND
> WD0GMD
>
> ----- Original Message -----
> From: afb7duy
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, April 24, 2013 11:01 AM
> Subject: [DrakeRadio] Re: General Coverage Receiver
>
> Hello Bernie.
>
> I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.
>
> Good luck with your quest.
>
> Jim Pruitt
> WA7DUY
>
> --- In DrakeRadio@yahoogroups.com, barcand@... wrote:
>>
>> I'll start my question with a statement - I love the Drake 2-B. It hears
>> everything some of my other receivers hear, and some things others can't
>> hear. So now, did Drake make any equivalently sensitive general coverage
>> receivers?? If so, can someone make a model recommendation, please?
>> Would love to have something to look forward to adding to my "collection".
>> Thanks in advance.
>> 73
>> Bernie in ND
>> WD0GMD
>>
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> Yahoo! Groups Links
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13369. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:44:51 UTC
From: Eddy Swynar
Topic: 13302 Message: 13369

On 2013-04-24, at 4:34 PM, Tim Kass wrote:

> I would also recommend the R4B over the other R4any..nothing to add but they have become expensive...the 11 tube version of the R4A is nearly the same as the R4B .. earlier R4A had 13 tubes... but there are variations even among the R4B units as well. Hard to find the correct schematic for the right R4B unit I had. A possible Drake sleeper is the SW-4A .. AM only, but I consider it a R4 (lite) .. looks just like an R4, same tube line up in the RF and IF sections...good sensitivity and 5kz crystal filter for AM making broadcast stations sound great. It has a bit more audio out than the R4's, has
> 3 watts versus 1.5 watts.
>
>

I have a "...just-plain-Jane-type" R-4 receiver here that I bought several years ago, which I absolutely LOVE to use.

Don't let the fact that the heart of the PTO in the R-4 is a 6AU6 tube, & not solid-state, deter you from acquiring one: the antics of the "superior" solid-state PTO in my T-4X transmitter (all well-documented in the Reflector archives, I'm sure) practically drove me to drink a few years ago, until I re-built almost the entire "works" with new parts!

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

13370. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:46:50 UTC
From: Garey Barrell
Topic: 13302 Message: 13370

Hi Eddy -

Does your R-4 have the VR tube? What is the s/n?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Eddy Swynar wrote:
> On 2013-04-24, at 4:34 PM, Tim Kass wrote:
>
>> I would also recommend the R4B over the other R4any..nothing to add but they have become expensive...the 11 tube version of the R4A is nearly the same as the R4B .. earlier R4A had 13 tubes... but there are variations even among the R4B units as well. Hard to find the correct schematic for the right R4B unit I had. A possible Drake sleeper is the SW-4A .. AM only, but I consider it a R4 (lite) .. looks just like an R4, same tube line up in the RF and IF sections...good sensitivity and 5kz crystal filter for AM making broadcast stations sound great. It has a bit more audio out than the R4's, has
>> 3 watts versus 1.5 watts.
>>
>>
> I have a "...just-plain-Jane-type" R-4 receiver here that I bought several years ago, which I absolutely LOVE to use.
>
> Don't let the fact that the heart of the PTO in the R-4 is a 6AU6 tube, & not solid-state, deter you from acquiring one: the antics of the "superior" solid-state PTO in my T-4X transmitter (all well-documented in the Reflector archives, I'm sure) practically drove me to drink a few years ago, until I re-built almost the entire "works" with new parts!
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13371. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:52:33 UTC
From: Eddy Swynar
Topic: 13302 Message: 13371

On 2013-04-24, at 4:46 PM, Garey Barrell wrote:

> Hi Eddy -
>
> Does your R-4 have the VR tube? What is the s/n?
>
>

Hi Garey,

YES, it does have the VR tube in it...

As for the serial number, I have it in the manual---which is in my car (of all places!) at the moment. But I believe it was something just over "07000" if memory serves me well...

~73~ de Eddy VE3CUI - VE3XZ_,_._,__

[Non-text portions of this message have been removed]

13372. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:56:00 UTC
From: Don Cunningham
Topic: 13302 Message: 13372

Garey,

If that is the OB2 on an "addon" piece of metal just in front of the 5HS6, s/n 0678 has the voltage regulator tube in it.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6270 - Release Date: 04/24/13

[Non-text portions of this message have been removed]

13373. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 20:58:21 UTC
From: Garey Barrell
Topic: 13302 Message: 13373

Eddy Swynar wrote:
> On 2013-04-24, at 4:46 PM, Garey Barrell wrote:
>
>> Hi Eddy -
>>
>> Does your R-4 have the VR tube? What is the s/n?
>>
>>
>
> Hi Garey,
>
> YES, it does have the VR tube in it...
>
> As for the serial number, I have it in the manual---which is in my car (of all places!) at the moment. But I believe it was something just over "07000" if memory serves me well...
>

Should be 3, maybe four digits..... <2000

13374. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 21:00:00 UTC
From: Garey Barrell
Topic: 13302 Message: 13374

Don -

Thanks, that's the one!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> If that is the OB2 on an "addon" piece of metal just in front of the 5HS6, s/n 0678 has the voltage regulator tube in it.
> 73,
> Don, WB5HAK
>
>

13375. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-24 21:11:49 UTC
From: Eddy Swynar
Topic: 13302 Message: 13375

On 2013-04-24, at 4:58 PM, Garey Barrell wrote:
>
> Should be 3, maybe four digits..... <2000
>

Hi Garey,

You're right: but I "...definitely" recall it starting with the numbers "07"...

I'll double-check to-morrow when I can get to the car...

~73~ de Eddy VE3CUI - VE3XZ
>

[Non-text portions of this message have been removed]

13376. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 00:01:31 UTC
From: Bill
Topic: 13302 Message: 13376

My R-4 is 0616 and it has the OB2. I got it in the spring of 1965.
Bill, N4WS

----- Original Message -----
From: "Don Cunningham" <donc@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, April 24, 2013 3:56 PM
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Garey,

If that is the OB2 on an "addon" piece of metal just in front of the 5HS6,
s/n 0678 has the voltage regulator tube in it.
73,
Don, WB5HAK

Yahoo! Groups Links

13377. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 00:10:34 UTC
From: Don Cunningham
Topic: 13302 Message: 13377

Thanks, Bill. That confirms two things at once. My QC tag showed a date of 3-1-65, so that matches, and the OB2 is in my rig too. Those things help. By the way, that was a good year, I graduated high school then, HI.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6271 - Release Date: 04/24/13

[Non-text portions of this message have been removed]

13378. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 01:31:17 UTC
From: Jim Shorney
Topic: 13325 Message: 13378

I don't see anything exotic or unobtanium in the NB-7 circuit diagram. There may even be an off-the-shelf solution for the IF transformers, but I suspect they would not be difficult to duplicate. Making an aftermarket NB-7 should be do-able, but I don't imagine it would be cheap.

I remember seeing an article years ago written by a fellow who adapted a Ten-Tec noise blanker option to an R-4C with good results. Maybe that would be another starting point.

73

-Jim
NU0C

On Wed, 24 Apr 2013 15:40:45 -0000, afb7duy wrote:

>Hello Don.
>
>It might be true that the NB7 is and was a great noise blanker but I see very few come up for sale and seldom when I have the money to buy them. Even then I have only seen them on ebay and they seem to go for a lot more money there than I am willing to pay. That is what prompted the question as I do not mind building something and actually prefer that option but I have not seen anything about building an NB7 or clone but have seen K8AC's version of the Aux7. It looked like just building an NB7 from scratch might be a bit hard with some parts no longer readily available and that was what prompted the question. I have one rig that has noise blankers in it and absolutely hate it because it distorts very badly but find that I do often need something since I get electric fence noise or steady buzz from some touch lamp or doorbell transformer or similar and neither of my TR7's have noise blankers. So I am on a quest to find something.
>
>Thank you.
>
>Jim Pruitt
>
>
>--- In DrakeRadio@yahoogroups.com, "Don Cunningham" <donc@...> wrote:
>>
>> Jim,
>>
>> I do agree that the NB7 is VERY pricey, but it is the best for taking out my electric fence "popping" AND it does it with little to no distortion of the incoming signals, even if they are strong. All the "modern" noise blankers, even the very complex ones that are variable and even with "NB1 and NB2" presentations do distort greatly, especially when you are receiving strong signals on the band with the weak ones. I think the NB7's are much superior to the others I have on hand.
>>

>> Now, noise reduction (labeled NR or DSP on modern receivers) is a very different animal, but these also distort at least the background so they are not clear like the NB7 on the same noise.
>>
>> Just my .02. Probably not worth that much, hi.
>> 73,
>> Don, WB5HAK
>>
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13379. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 01:48:57 UTC
From: Jim Shorney
Topic: 13325 Message: 13379

No, I don't, but it seems to me that the circuit wasn't all that complex. If the DSP IC is running, there is hope. Check for cracked or cold solder connections, power where it's supposed to be, clock oscillator running, the usual. Could be as simple as a bad speaker jack or switch, blown audio amp, etc.

73

-Jim
NU0C

On Wed, 24 Apr 2013 15:55:46 -0000, afb7duy wrote:

>Jim,
>
>Do you happen to have a schematic for the Clearspeech? I bought one some time back that does not work. Heil never made that info avialable and then reviews said that someone else makes it now but neither let the schematic out.
>
>I had also thought about the BHI as I think QST had some article 2 or 3 years ago that used the module in something else but again even that module was not cheap.
>
>Thank you.
>
>Jim Pruitt
>
>
>--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>>
>>
>> I have a Clearspeech Base that I use with the 7-line. It doesn't do anything
>> for the buzz saw, but with atmospherics, system noise (hiss), and static
>> crashes it ranges anywhere from mediocre to amazing. I sometimes use it in
>> conjunction with a classic Autek QF-1A. I recently acquired a gadget called a
>> Jabco Voice Gate that may prove interesting, but likely will not add much to
>> the overall system.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>> On Tue, 23 Apr 2013 21:45:30 -0400 (EDT), el34guy@... wrote:
>>
>> >I've been using the BHI dsp noise reduction on my tr7 and its quite good. Really like it so far, I haven't had it too long actually. I have it wired right into the speaker. I'd

say its another noise reducer that actually works!
>>
>> --
>>
>> "A deep understanding of reality is exactly the same thing as laziness." - Wally,
"Dilbert"
>>
>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13380. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 01:52:13 UTC
From: Jim Shorney
Topic: 13325 Message: 13380

Carfeful, Garey, you're spoiling yoru reputation as a Luddite.... :)

73

-Jim
NU0C

On Wed, 24 Apr 2013 11:09:02 -0400, Garey Barrell wrote:

> I got a
>DSP-59+ when it was introduced a year or so later

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

13381. Re: [DrakeRadio] Re: Is there a modern TR7 noise blanker?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 01:57:29 UTC
From: Garey Barrell
Topic: 13325 Message: 13381

Shhhhhhhh....

Jim Shorney wrote:
> Carfeful, Garey, you're spoiling yoru reputation as a Luddite.... :)
>
> 73
>
> -Jim
> NU0C
>
> On Wed, 24 Apr 2013 11:09:02 -0400, Garey Barrell wrote:
>
>> I got a
>> DSP-59+ when it was introduced a year or so later
> --
>
> "I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"
>
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> Yahoo! Groups Links
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13382. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 02:07:43 UTC
From: Steve Wedge
Topic: 13302 Message: 13382

My R-4 has a 0B2 and it's s/n 936.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, April 24, 2013 3:31 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Bernie -

I would suggest going for an R-4A rather than the R-4. Several
improvements were made between the two.

The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
tube PTO to solid state. The late R-4 added a VR tube, but I don't
know at what s/n. There were about 2000 each made of the R-4 and
early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
converted a few more stages from tube to transistor but even the
Version 3 of the R-4B was still all tube through the RF, IF and AF
Output. TheProduct Detector and AF Preamp stages are tube through the
Early R-4A.

ALL are functionally identical, with an identical block diagram.
Changes from the Late R-4A to the R-4B are primarily cosmetic and
refinements..

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Bernie wrote:
> Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit. Thankls
for the suggestions.
> 73
>
> Bernie in ND
> WD0GMD
>

>
> ----- Original Message -----
> From: afb7duy
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, April 24, 2013 11:01 AM
> Subject: [DrakeRadio] Re: General Coverage Receiver
>
>
>
> Hello Bernie.
>
> I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.
>
> Good luck with your quest.
>
> Jim Pruitt
> WA7DUY
>
> --- In DrakeRadio@yahoogroups.com, barcand@... wrote:
> >
> >
> > I'll start my question with a statement - I love the Drake 2-B. It hears
> > everything some of my other receivers hear, and some things others can't
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> > receivers?? If so, can someone make a model recommendation, please?
> > Would love to have something to look forward to adding to my "collection".
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13383. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 02:44:30 UTC
From: Fernando
Topic: 13302 Message: 13383

I'll at to the list.

R-4 with 0B2 and s/n 717

Reminds me of that dance with the bar, how low can you go. hi..

Fernando N2FQ/6
n2fq@...

On Apr 24, 2013, at 7:07 PM, Steve Wedge <w1es1982@...> wrote:

> My R-4 has a 0B2 and it's s/n 936.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Wednesday, April 24, 2013 3:31 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
>
>
>
> Bernie -
>
> I would suggest going for an R-4A rather than the R-4. Several
> improvements were made between the two.
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> tube PTO to solid state. The late R-4 added a VR tube, but I don't
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> early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
> converted a few more stages from tube to transistor but even the
> Version 3 of the R-4B was still all tube through the RF, IF and AF
> Output. TheProduct Detector and AF Preamp stages are tube through the
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> ALL are functionally identical, with an identical block diagram.

> Changes from the Late R-4A to the R-4B are primarily cosmetic and
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> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> From: afb7duy
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>> Sent: Wednesday, April 24, 2013 11:01 AM
>> Subject: [DrakeRadio] Re: General Coverage Receiver
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13384. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 02:55:52 UTC
From: Don Cunningham
Topic: 13302 Message: 13384

Bill already won the lowest so far at s/n 616, Fernando. That may also explain so many shipping in such a short time in the spring of 1965 as Steve and I reported earlier. They may have been putting in the updates before shipping them

I have an original Drake R-4 manual with my s/n 678 radio that has a handwritten note that it was for s/n 0598, and on the back is a stamped note saying "IMPORTANT, This book does not show the OB2 voltage regulator and other circuit features incorporated in production models. An up to date book will be available soon and will be sent to you after the receipt of your registration card."

Again, I cannot prove that it was for s/n 0598, but that's what it says on the cover.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6271 - Release Date: 04/24/13

[Non-text portions of this message have been removed]

13385. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 04:16:06 UTC
From: VE3AX/7
Topic: 13302 Message: 13385

Just to add confusion to the mix...

I have two R-4's here. One is 0765 which I'll assume has the OB2 VR tube – can't see it as it is in a CA-1 stacking cabinet with the T-4X.

Much to my surprise, the 2nd R-4, serial # 0051, does have the OB2 VR tube making it a 14 tube rx, with the OB2 mounted on the add-on piece in a cut-out square on the chassis. And a fine working receiver it is!

Drake must have added that VR tube pretty early in the line-up!

73

Peter
VE3AX/7

From: Steve Wedge
Sent: Wednesday, April 24, 2013 7:07 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

My R-4 has a 0B2 and it's s/n 936.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, April 24, 2013 3:31 PM
To: mailto:DrakeRadio%40yahoogroups.com
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Bernie -

I would suggest going for an R-4A rather than the R-4. Several
improvements were made between the two.

The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
tube PTO to solid state. The late R-4 added a VR tube, but I don't
know at what s/n. There were about 2000 each made of the R-4 and
early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
converted a few more stages from tube to transistor but even the
Version 3 of the R-4B was still all tube through the RF, IF and AF
Output. TheProduct Detector and AF Preamp stages are tube through the
Early R-4A.

ALL are functionally identical, with an identical block diagram.
Changes from the Late R-4A to the R-4B are primarily cosmetic and
refinements..

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Bernie wrote:
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> 73
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> Bernie in ND
> WD0GMD
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> ----- Original Message -----
> From: afb7duy
> To: mailto:DrakeRadio%40yahoogroups.com
> Sent: Wednesday, April 24, 2013 11:01 AM
> Subject: [DrakeRadio] Re: General Coverage Receiver
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13386. General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 04:32:59 UTC
From: John Sehring
Topic: 13302 Message: 13386

I'm not sure I totally like *any* of the R-4_ line for HF broadcast listening. I've had many from R-4 to late R-4B.

The problem is pinched audio quality from the diode envelope AM detector.

It is better with the R-4 and R-4A (13 tuber). With R-4B (don't know which exact version it is), the low end audio is simply rolled off to much. So much audio is missing, it sounds as the transmitting station is running quite low modulation levels.

No, I'm not looking for a lot of bass, down to about 250 Hz would be just fine, thank you. Maybe just the AF cap that delivers audio from only the AM detector needs trimming. I find the SSB AF frequency spot on.

In find the R-4A (13 t) & R-4 have better audio quality.

Two reasons...better product detector (the SS prod det circuit in the R-4B has problems with BFO leakage and distortion on modulation peaks--Bob Sherwood's web site on that)...two the audio stages are not tip top designs.

I feel that Drake did not have the handle on SS design but of course I find the tube stuff to be excellent.

For AM, I find the selectivity to be quite good in the 4.8 kHz bandwidth. But don't forget to bring the passband tuning to either hard left (9 o'clock) or hard right (3 o'clock) for best bandpass shape.

Using my crystal for 160 m coverage, I can swing down into the broadcast band where I can sometimes hear between-10 kHz-channel AM broadcast signals for elsewhere than N.A.

Another problem is the noise blanker, which I find excellent for pulse elimination in SSB/CW, does nada for AM signals. An automatic (its action modulated by AGC) noise limiter would be lovely but that's never going to happen, RIP.

You could get around that a little bit by using the "fast" agc but of course the R-4* switching won't let you do that!!!

I too have used the Timewave 59+ since its inception with my R-4*'s. Its AF selectivity, automatic multi-notch filter, and noise reduction is amazing to me even in the days of SDR radios.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

[Non-text portions of this message have been removed]

13387. MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 11:56:59 UTC
From: Edward
Topic: 13302 Message: 13387

Sure this has been covered before and based on historical data, the most widely recommended replacement was offered by Surplus Sales of NE. Unfortunately they're sold out.

Any other sources for this?

Thanks
Ed

13388. Ebay DRake SPR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 12:56:28 UTC
From: dickbolt@...
Topic: 13388 Message: 13388

My Drake SPR-4 Receiver is now up on Ebay:

http://www.ebay.com/itm/Drake-SPR-4-Shortwave-SSB-CW-Classic-Receiver-/111059352620?pt=US_Ham_Radio_Receivers&hash=item19dba73c2c
W1DGA

[Non-text portions of this message have been removed]

13389. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 13:42:10 UTC
From: Bill
Topic: 13302 Message: 13389

I had a T-4 s/n 0018 that I sent in for a repair and had it converted to a T-4X. There was no change to the s/n. The #0015 R-4 may have had the O2B added as a modification for one reason or another.

Bill

----- Original Message -----
From: "VE3AX/7" <ve3ax@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, April 24, 2013 11:16 PM
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Just to add confusion to the mix...

I have two R-4's here. One is 0765 which I'll assume has the OB2 VR tube – can't see it as it is in a CA-1 stacking cabinet with the T-4X.

Much to my surprise, the 2nd R-4, serial # 0051, does have the OB2 VR tube making it a 14 tube rx, with the OB2 mounted on the add-on piece in a cut-out square on the chassis. And a fine working receiver it is!

Drake must have added that VR tube pretty early in the line-up!

73

Peter
VE3AX/7

13390. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 13:43:42 UTC
From: Garey Barrell
Topic: 13302 Message: 13390

Thanks Steve...

I had one of the very first R-4s, and I'm pretty sure it didNOT have
the VR tube in it. I'm guessing it didn't take very long in the field
before new owners started complaining about the stability. The first
'Preliminary' schematic that was shipped with the manual stating that
a 'Final' schematic would be out 'soon' did not show the VR tube. So
far we're down to s/n 270 WITH the VR, so if any escaped the factory
without it remains to be seen!

Anybody got an R-4 WITHOUT the VR tube??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
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> Steve Wedge, W1ES/4
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> All my computers have my signature with various pearls of wisdom appended thereto.
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> From: Garey Barrell
> Sent: Wednesday, April 24, 2013 3:31 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
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> Version 3 of the R-4B was still all tube through the RF, IF and AF
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> ALL are functionally identical, with an identical block diagram.
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> Glen Allen, VA
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>> WD0GMD
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>> ----- Original Message -----
>> From: afb7duy
>> To: DrakeRadio@yahoogroups.com
>> Sent: Wednesday, April 24, 2013 11:01 AM
>> Subject: [DrakeRadio] Re: General Coverage Receiver
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13391. Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 13:50:34 UTC
From: qrpcwop
Topic: 13302 Message: 13391

Which is why I recommend something in the R8 family. My R8 is still going strong after 20 years. It's a joy to listen to for hours at a time.

Al, K2ZN

--- In DrakeRadio@yahoogroups.com, John Sehring <wb0eq@...> wrote:
>
> I'm not sure I totally like *any* of the R-4_ line for HF broadcast listening. I've had many from R-4 to late R-4B.
>
> The problem is pinched audio quality from the diode envelope AM detector.
>

13392. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 13:55:34 UTC
From: Tim Kass
Topic: 13302 Message: 13392

Thanks Gary..

--- On Wed, 4/24/13, Garey Barrell <k4oah@...> wrote:

From: Garey Barrell <k4oah@...>
Subject: Re: [DrakeRadio] Re: General Coverage Receiver
To: DrakeRadio@yahoogroups.com
Date: Wednesday, April 24, 2013, 4:42 PM

Tim -

There were two versions each of the R-4, two versions ofthe Early
R-4A, Two versions of the Late R-4A andthree versions of the R-4B.
All versions are on the appropriate Service supplement CDs.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Tim Kass wrote:
> I would also recommend the R4B over the other R4any..nothing to add but they have become expensive...the 11 tube version of the R4A is nearly the same as the R4B .. earlier R4A had 13 tubes... but there are variations even among the R4B units as well. Hard to find the correct schematic for the right R4B unit I had. A possible Drake sleeper is the SW-4A .. AM only, but I consider it a R4 (lite) .. looks just like an R4, same tube line up in the RF and IF sections...good sensitivity and 5kz crystal filter for AM making broadcast stations sound great. It has a bit more audio out than the R4's, has
> 3 watts versus 1.5 watts.
>
> Either way, you wont lose any money on these radios, I've owned about 20 of them over the years.
>
> 73, Tim K8WBL
>
>
> --- On Wed, 4/24/13, Bernie <barcand@...> wrote:
>
>
> From: Bernie <barcand@...>
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
> To: DrakeRadio@yahoogroups.com
> Date: Wednesday, April 24, 2013, 2:18 PM
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> Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit. Thankls for the suggestions.
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> WD0GMD
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> ----- Original Message -----
> From: afb7duy
> To: DrakeRadio@yahoogroups.com
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13393. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 14:04:56 UTC
From: Paul Christensen
Topic: 13302 Message: 13393

Garey,

Probably a design "carry-over" from the 1A and early 2 series? The 1A has no VR, but it's easy to add and hide a 105V Zener to allow for better VFO regulation with line voltage changes. A series resistor is already part of the circuit that can be used as the Zener current limiter. Of course, no PTO in the 1A but even without the Zener, stability is very good.

I would need to go back and verify, but I don't believe the Collins 70K2 as used in the S/Line uses a VR. Stability is superb, but Collins did cheat a bit by limiting the PTO range to only 200 kHz segments. That added to the S/Line production cost since additional heterodyne crystals were needed as well as more switch contact positions.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Thursday, April 25, 2013 9:43 AM
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Thanks Steve...

I had one of the very first R-4s, and I'm pretty sure it didNOT have
the VR tube in it. I'm guessing it didn't take very long in the field
before new owners started complaining about the stability. The first
'Preliminary' schematic that was shipped with the manual stating that
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Anybody got an R-4 WITHOUT the VR tube??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
> My R-4 has a 0B2 and it's s/n 936.
>
> 73,
>
> Steve Wedge, W1ES/4
>

> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Wednesday, April 24, 2013 3:31 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
>
>
>
> Bernie -
>
> I would suggest going for an R-4A rather than the R-4. Several
> improvements were made between the two.
>
> The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
> tube PTO to solid state. The late R-4 added a VR tube, but I don't
> know at what s/n. There were about 2000 each made of the R-4 and
> early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
> converted a few more stages from tube to transistor but even the
> Version 3 of the R-4B was still all tube through the RF, IF and AF
> Output. TheProduct Detector and AF Preamp stages are tube through the
> Early R-4A.
>
> ALL are functionally identical, with an identical block diagram.
> Changes from the Late R-4A to the R-4B are primarily cosmetic and
> refinements..
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Bernie wrote:
>> Thanks, Jim. Would love to have an early R-4. Will look it up and study it a bit.
Thankls for the suggestions.
>> 73
>>
>> Bernie in ND
>> WD0GMD
>>
>>
>> ----- Original Message -----
>> From: afb7duy

>> To: DrakeRadio@yahoogroups.com
>> Sent: Wednesday, April 24, 2013 11:01 AM
>> Subject: [DrakeRadio] Re: General Coverage Receiver
>>
>>
>>
>> Hello Bernie.
>>
>> I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.
>>
>> Good luck with your quest.
>>
>> Jim Pruitt
>> WA7DUY
>>
>> --- In DrakeRadio@yahoogroups.com, barcand@... wrote:
>>>
>>> I'll start my question with a statement - I love the Drake 2-B. It hears
>>> everything some of my other receivers hear, and some things others can't
>>> hear. So now, did Drake make any equivalently sensitive general coverage
>>> receivers?? If so, can someone make a model recommendation, please?
>>> Would love to have something to look forward to adding to my "collection".
>>> Thanks in advance.
>>> 73
>>> Bernie in ND
>>> WD0GMD
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13394. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 14:04:29 UTC
From: VE3AX/7
Topic: 13302 Message: 13394

Garey:

<So far we're down to s/n 270 WITH the VR, so if any escaped the factory
without it remains to be seen!>

Actually, we are down to s/n # 0051 WITH the VR tube.

I suppose it is possible that Drake modified the radio, adding the OB2, after initial sale. It’s definitely not home-brewed. They would do stuff like that – I have a 26xxx TR-4 here with a factory installed front panel switched CW filter as an example.

73

Peter
VE3AX/7

From: Garey Barrell
Sent: Thursday, April 25, 2013 6:43 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: General Coverage Receiver

Thanks Steve...

I had one of the very first R-4s, and I'm pretty sure it didNOT have
the VR tube in it. I'm guessing it didn't take very long in the field
before new owners started complaining about the stability. The first
'Preliminary' schematic that was shipped with the manual stating that
a 'Final' schematic would be out 'soon' did not show the VR tube. So
far we're down to s/n 270 WITH the VR, so if any escaped the factory
without it remains to be seen!

Anybody got an R-4 WITHOUT the VR tube??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> My R-4 has a 0B2 and it's s/n 936.
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>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Wednesday, April 24, 2013 3:31 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
>
>
>
> Bernie -
>
> I would suggest going for an R-4A rather than the R-4. Several
> improvements were made between the two.
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> The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
> tube PTO to solid state. The late R-4 added a VR tube, but I don't
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> early R-4A, ~3000 of the late R-4A, and about 9000 of the R-4B. Each
> converted a few more stages from tube to transistor but even the
> Version 3 of the R-4B was still all tube through the RF, IF and AF
> Output. TheProduct Detector and AF Preamp stages are tube through the
> Early R-4A.
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> Glen Allen, VA
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> <www.k4oah.com>
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Thankls for the suggestions.
>> 73
>>
>> Bernie in ND
>> WD0GMD
>>
>>
>> ----- Original Message -----
>> From: afb7duy
>> To: mailto:DrakeRadio%40yahoogroups.com

>> Sent: Wednesday, April 24, 2013 11:01 AM
>> Subject: [DrakeRadio] Re: General Coverage Receiver
>>
>>
>>
>> Hello Bernie.
>>
>> I did not see a reply to you so I will start the ball rolling. My suggestion would be to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need other filters. The SPR4 would also be an alternative since it was supposed to be the solid state equivalent of the R4A, B, and C. You would need to either get an FS4 or get several various band crystals for the various shortwave bands you want to listen to or get the FS4 or one of the DDS generators with amplifier to simulate the FS4. I originally got my R4B because I loved to listen to shortwave broadcasts and also wanted a receiver that covered the weird frequencies that the mars program I am in uses and alwork as a ham band receiver.
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>> Jim Pruitt
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>> --- In mailto:DrakeRadio%40yahoogroups.com, barcand@... wrote:
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>>> receivers?? If so, can someone make a model recommendation, please?
>>> Would love to have something to look forward to adding to my "collection".
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[Non-text portions of this message have been removed]

13395. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 14:27:42 UTC
From: Garey Barrell
Topic: 13302 Message: 13395

John -

Excellent points. The audio in all of the R-4(any) is definitely tailored for SSB. Many SSB signals of the day had poor Carrier and 'rumble' suppression, including the T-4X, due to wider skirts of the typical 4 pole filters used. So most receivers and transmitter AF stages tended to roll off the bottom 3-400 Hz. A larger coupling cap was used in later versions, after the Early 'A'.

I wonder about your R-4B experience, as coupling capacitors were made considerably larger than those in the Late 'A'. The 0.1 uF, 12V ceramic caps are not the most reliable. Perhaps it's that 'tube' sound! :-) The audio stages in all are Class A, so any 'shaping' accomplished is via coupling and bypass caps. There is some negative feedback in a few stages.

The dual diode PD in the later versions is prone to BFO leakage, and this is improved considerably by replacing the 1N270 Germanium diodes with better matched Schottky diodes. They also handle audio peaks better. What could be better than a diode with a cat-whisker in it!?!? :-)

The Noise Blanker works on AM, but it is masked by the Slow AVC. If you have noise spikes of greater amplitude than the signal, the S-Meter will 'peak detect' it and display an average level. IF the noise is the very short, high amplitude spikes intended to be suppressed by this type of blanker, it will 'punch' holes. However the 'average' signal level is still high because of the carrier, so the S-Meter doesn't drop as dramatically as it does with SSB. Checking the efficacy ofthe NB is easily done by connected a piece of wire to the antenna input, and dragging the other end along a grounded metal surface. The S-Meter drop is dramatic because you're looking at a very low average power.

All are part of the 'Drake experience'! :-) Most all of these 'shortcomings' can be 'cured' by replacing the Drake with a shiny new Yaecomwood cable boxfor $4-5k. But that kind of defeats the purpose, doesn't it!!!?!?! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
> I'm not sure I totally like *any* of the R-4_ line for HF broadcast listening. I've had many from R-4 to late R-4B.
>
> The problem is pinched audio quality from the diode envelope AM detector.
>
> It is better with the R-4 and R-4A (13 tuber). With R-4B (don't know which exact version it is), the low end audio is simply rolled off to much. So much audio is missing, it sounds as the transmitting station is running quite low modulation levels.
>
> No, I'm not looking for a lot of bass, down to about 250 Hz would be just fine, thank you. Maybe just the AF cap that delivers audio from only the AM detector needs trimming. I find the SSB AF frequency spot on.
>
> In find the R-4A (13 t) & R-4 have better audio quality.
>
> Two reasons...better product detector (the SS prod det circuit in the R-4B has problems with BFO leakage and distortion on modulation peaks--Bob Sherwood's web site on that)...two the audio stages are not tip top designs.
>
> I feel that Drake did not have the handle on SS design but of course I find the tube stuff to be excellent.
>
> For AM, I find the selectivity to be quite good in the 4.8 kHz bandwidth. But don't forget to bring the passband tuning to either hard left (9 o'clock) or hard right (3 o'clock) for best bandpass shape.
>
> Using my crystal for 160 m coverage, I can swing down into the broadcast band where I can sometimes hear between-10 kHz-channel AM broadcast signals for elsewhere than N.A.
>
> Another problem is the noise blanker, which I find excellent for pulse elimination in SSB/CW, does nada for AM signals. An automatic (its action modulated by AGC) noise limiter would be lovely but that's never going to happen, RIP.
>
> You could get around that a little bit by using the "fast" agc but of course the R-4* switching won't let you do that!!!
>
> I too have used the Timewave 59+ since its inception with my R-4*'s. Its AF selectivity, automatic multi-notch filter, and noise reduction is amazing to me even in the days of SDR radios.
>
> --John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13396. Re: [DrakeRadio] MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 14:42:14 UTC
From: Paul Kraemer
Topic: 13302 Message: 13396

Parts Express
BRS5768 costs less than $10
5X7 and 4 ohms with a nice response and plenty power handling
Looks like a very good choice to me
Paul K0UYA
----- Original Message -----
From: "Edward" <navydude1962@...>
To: <DrakeRadio@yahoogroups.com>
Cc: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 25, 2013 6:56 AM
Subject: [DrakeRadio] MS4 Replacement Speaker

> Sure this has been covered before and based on historical data, the most
> widely recommended replacement was offered by Surplus Sales of NE.
> Unfortunately they're sold out.
>
> Any other sources for this?
>
> Thanks
> Ed
>
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> Yahoo! Groups Links
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13397. Re: [DrakeRadio] MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 14:49:10 UTC
From: Garey Barrell
Topic: 13302 Message: 13397

Ed -

I think the best source is auto sound stores. MANY 'door' speakers
are 5 x 7, andmost all are 4 ohm. I would suggest making a tracing of
the outline and mounting holes of the original speaker, and take that
toan auto sound shop to check for fit. They are typically concerned
about depth, which doesn't concern us.

The BOSS line looks to be a good place to start, Amazon has a 'likely
suspect' for $12. It's model BRS5768. If I needed one, that's what I'd
buy, just to see! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> Ed
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13398. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 15:06:52 UTC
From: Garey Barrell
Topic: 13302 Message: 13398

Paul -

The 2-A and 2-B never had VR tubes either. I suspect the PTO was more
sensitive to voltage change than the earlier VFO's. Hard to believe! :-)

Another factor was with the 1 kHz calibration markings, people were
more critical of a little drift.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Christensen wrote:
> Garey,
>
> Probably a design "carry-over" from the 1A and early 2 series? The 1A has no VR, but it's easy to add and hide a 105V Zener to allow for better VFO regulation with line voltage changes. A series resistor is already part of the circuit that can be used as the Zener current limiter. Of course, no PTO in the 1A but even without the Zener, stability is very good.
>
> I would need to go back and verify, but I don't believe the Collins 70K2 as used in the S/Line uses a VR. Stability is superb, but Collins did cheat a bit by limiting the PTO range to only 200 kHz segments. That added to the S/Line production cost since additional heterodyne crystals were needed as well as more switch contact positions.
>
> Paul, W9AC
>
>
>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, April 25, 2013 9:43 AM
> Subject: Re: [DrakeRadio] Re: General Coverage Receiver
>
>
>
> Thanks Steve...
>
> I had one of the very first R-4s, and I'm pretty sure it didNOT have
> the VR tube in it. I'm guessing it didn't take very long in the field
> before new owners started complaining about the stability. The first

> 'Preliminary' schematic that was shipped with the manual stating that
> a 'Final' schematic would be out 'soon' did not show the VR tube. So
> far we're down to s/n 270 WITH the VR, so if any escaped the factory
> without it remains to be seen!
>
> Anybody got an R-4 WITHOUT the VR tube??
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> > Steve Wedge, W1ES/4
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> > All my computers have my signature with various pearls of wisdom appended thereto.
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> >
> >
> > From: Garey Barrell
> > Sent: Wednesday, April 24, 2013 3:31 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] Re: General Coverage Receiver
> >
> >
> >
> > Bernie -
> >
> > I would suggest going for an R-4A rather than the R-4. Several
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> > The early R-4A (s/n <4000) is on my early A-Line CD and changed from a
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> > Bernie wrote:
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Thankls for the suggestions.
> >> 73
> >>
> >> Bernie in ND
> >> WD0GMD
> >>
> >>
> >> ----- Original Message -----
> >> From: afb7duy
> >> To: DrakeRadio@yahoogroups.com
> >> Sent: Wednesday, April 24, 2013 11:01 AM
> >> Subject: [DrakeRadio] Re: General Coverage Receiver
> >>
> >>
> >>
> >> Hello Bernie.
> >>
> >> I did not see a reply to you so I will start the ball rolling. My suggestion would be
to acquire a Drake R4 (any) although the R4B would be the best choice as you did not need
other filters. The SPR4 would also be an alternative since it was supposed to be the solid
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> >> Good luck with your quest.
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> >> Jim Pruitt
> >> WA7DUY
> >>
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> >>>
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> >>> Would love to have something to look forward to adding to my "collection".

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> >>> 73
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> >>> WD0GMD
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13399. Re: [DrakeRadio] MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 15:09:43 UTC
From: Garey Barrell
Topic: 13302 Message: 13399

Paul -

Small minds must run in the same trenches!! :-) I have 'Prime' with
Amazon, so $12 and no shipping.! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
> Parts Express
> BRS5768 costs less than $10
> 5X7 and 4 ohms with a nice response and plenty power handling
> Looks like a very good choice to me
> Paul K0UYA
> ----- Original Message -----
> From: "Edward" <navydude1962@...>
> To: <DrakeRadio@yahoogroups.com>
> Cc: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, April 25, 2013 6:56 AM
> Subject: [DrakeRadio] MS4 Replacement Speaker
>
>
>> Sure this has been covered before and based on historical data, the most
>> widely recommended replacement was offered by Surplus Sales of NE.
>> Unfortunately they're sold out.
>>
>> Any other sources for this?
>>
>> Thanks
>> Ed
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>> Yahoo! Groups Links
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13400. Re: [DrakeRadio] MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 16:26:29 UTC
From: Paul Kraemer
Topic: 13302 Message: 13400

So that is the reason!
I have always gotten great merchandise from Parts Express, no regrets, and with a liberal 45 day return policy hard to beat.
Never thought to check what the Amazon price would be.
I have that 5x7 speaker and a couple round ones on my next order wish list just to check them with my ears.
Of course, I have realized more and more lately that issues like what is the best microphone, speaker, paint color, pizza and coffee do not have a correct answer because they are very subjective and depends totally on the individuals sensors.
I have somewhat refined sensors (cause I said so) but YMMV
Paul K0UYA
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 25, 2013 10:09 AM
Subject: Re: [DrakeRadio] MS4 Replacement Speaker

> Paul -
>
> Small minds must run in the same trenches!! :-) I have 'Prime' with
> Amazon, so $12 and no shipping.! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> 5X7 and 4 ohms with a nice response and plenty power handling
>> Looks like a very good choice to me
>> Paul K0UYA
>> ----- Original Message -----
>> From: "Edward" <navydude1962@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Cc: <DrakeRadio@yahoogroups.com>
>> Sent: Thursday, April 25, 2013 6:56 AM
>> Subject: [DrakeRadio] MS4 Replacement Speaker
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13401. Re: [DrakeRadio] Re: General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 16:33:29 UTC
From: Eddy Swynar
Topic: 13302 Message: 13401

On 2013-04-24, at 4:58 PM, Garey Barrell wrote:
>
>
> Should be 3, maybe four digits..... <2000
>

Hi Garey et al,

As promised here yesterday, the serial number of my just-plain-jane R-4 receiver here is 0769...

...And YES, it DOES have the voltage regulator tube incorporated in it by the factory.

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

13402. Re: MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 17:59:56 UTC
From: radiomanL
Topic: 13302 Message: 13402

If you have the AC3 or AC4 installed check that there is the space . auto speakers usually have larger and stronger magnets .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13403. Re: Ebay DRake SPR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 17:08:47 UTC
From: Dave AA7EE
Topic: 13388 Message: 13403

Aah yes. I saw that the other day. I've been looking for all things Drake on eBay recently, just in case I decide to ignore my radio budget :-)

Hope the auction goes well for you and you find a buyer,

Dave
AA7EE

> My Drake SPR-4 Receiver is now up on Ebay:

13404. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 17:39:24 UTC
From: Richard Knoppow
Topic: 13302 Message: 13404

Regarding the noise suppressor: I think its main
advantage is in preventing noise pulses from actuating the
AVC and desensitizing the receiver. In older receivers
using noise clippers following the detector the audibility
of noise might be considerably reduced but its effect on the
AVC was nil. The blanker operates on the signal before it
gets to the AVC detector so the relative signal at the AVC
is not increased so much. Since the diode detector used for
conventional AVC are peak detectors the AVC level can be
quite considerably increased by short duty cycle pulses such
as ignition noise. The blanker works quite well on these
but does nothing for power line and similar noise.
I verified the noise blanker in my R4B was working by
setting up a pulse generator in the form of a bug key with
about a 4 Henry choke in series with three 9V batteries.
This makes very strong ignition noise type pulses. They
could still be heard with the noise blanker on but the
S-meter read more than 20 db lower than with it off. I did
not test with a carrier present but can do so to get a
closer approximation to normal receiving conditions. On the
usual noise from power lines, bad streetlamps, CF lamps,
etc., one can not tell if the NB is on or off, it does
nothing.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 25, 2013 7:27 AM
Subject: Re: [DrakeRadio] General Coverage Receiver

> John -
>
> Excellent points. The audio in all of the R-4(any) is
> definitely
> tailored for SSB. Many SSB signals of the day had poor
> Carrier and
> 'rumble' suppression, including the T-4X, due to wider
> skirts of the
> typical 4 pole filters used. So most receivers and
> transmitter AF

> stages tended to roll off the bottom 3-400 Hz. A larger
> coupling cap
> was used in later versions, after the Early 'A'.
>
> I wonder about your R-4B experience, as coupling
> capacitors were made
> considerably larger than those in the Late 'A'. The 0.1
> uF, 12V
> ceramic caps are not the most reliable. Perhaps it's that
> 'tube'
> sound! :-) The audio stages in all are Class A, so any
> 'shaping'
> accomplished is via coupling and bypass caps. There is
> some negative
> feedback in a few stages.
>
> The dual diode PD in the later versions is prone to BFO
> leakage, and
> this is improved considerably by replacing the 1N270
> Germanium diodes
> with better matched Schottky diodes. They also handle
> audio peaks
> better. What could be better than a diode with a
> cat-whisker in
> it!?!? :-)
>
> The Noise Blanker works on AM, but it is masked by the
> Slow AVC. If
> you have noise spikes of greater amplitude than the
> signal, the
> S-Meter will 'peak detect' it and display an average
> level. IF the
> noise is the very short, high amplitude spikes intended to
> be
> suppressed by this type of blanker, it will 'punch' holes.
> However the
> 'average' signal level is still high because of the
> carrier, so the
> S-Meter doesn't drop as dramatically as it does with SSB.
> Checking the
> efficacy ofthe NB is easily done by connected a piece of
> wire to the
> antenna input, and dragging the other end along a grounded
> metal
> surface. The S-Meter drop is dramatic because you're
> looking at a very
> low average power.
>
> All are part of the 'Drake experience'! :-) Most all of
> these

> 'shortcomings' can be 'cured' by replacing the Drake with
> a shiny new
> Yaecomwood cable boxfor $4-5k. But that kind of defeats
> the purpose,
> doesn't it!!!?!?! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

13405. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 18:09:45 UTC
From: Garey Barrell
Topic: 13302 Message: 13405

Richard -

Did you try my 'antenna lead dragged on a grounded surface' method??
People go through all sorts of machinations to generates short pulses,
and I'm beginning to wonder if MY receivers are the ONLY ones that
work this way?? I check the NB on every receiver I work on using this
method, and have found only one (TR-4) that needed to be adjusted.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> Regarding the noise suppressor: I think its main
> advantage is in preventing noise pulses from actuating the
> AVC and desensitizing the receiver. In older receivers
> using noise clippers following the detector the audibility
> of noise might be considerably reduced but its effect on the
> AVC was nil. The blanker operates on the signal before it
> gets to the AVC detector so the relative signal at the AVC
> is not increased so much. Since the diode detector used for
> conventional AVC are peak detectors the AVC level can be
> quite considerably increased by short duty cycle pulses such
> as ignition noise. The blanker works quite well on these
> but does nothing for power line and similar noise.
> I verified the noise blanker in my R4B was working by
> setting up a pulse generator in the form of a bug key with
> about a 4 Henry choke in series with three 9V batteries.
> This makes very strong ignition noise type pulses. They
> could still be heard with the noise blanker on but the
> S-meter read more than 20 db lower than with it off. I did
> not test with a carrier present but can do so to get a
> closer approximation to normal receiving conditions. On the
> usual noise from power lines, bad streetlamps, CF lamps,
> etc., one can not tell if the NB is on or off, it does
> nothing.
>
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL

> dickburk@...
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, April 25, 2013 7:27 AM
> Subject: Re: [DrakeRadio] General Coverage Receiver
>
>
>> John -
>>
>> Excellent points. The audio in all of the R-4(any) is
>> definitely
>> tailored for SSB. Many SSB signals of the day had poor
>> Carrier and
>> 'rumble' suppression, including the T-4X, due to wider
>> skirts of the
>> typical 4 pole filters used. So most receivers and
>> transmitter AF
>> stages tended to roll off the bottom 3-400 Hz. A larger
>> coupling cap
>> was used in later versions, after the Early 'A'.
>>
>> I wonder about your R-4B experience, as coupling
>> capacitors were made
>> considerably larger than those in the Late 'A'. The 0.1
>> uF, 12V
>> ceramic caps are not the most reliable. Perhaps it's that
>> 'tube'
>> sound! :-) The audio stages in all are Class A, so any
>> 'shaping'
>> accomplished is via coupling and bypass caps. There is
>> some negative
>> feedback in a few stages.
>>
>> The dual diode PD in the later versions is prone to BFO
>> leakage, and
>> this is improved considerably by replacing the 1N270
>> Germanium diodes
>> with better matched Schottky diodes. They also handle
>> audio peaks
>> better. What could be better than a diode with a
>> cat-whisker in
>> it!?!? :-)
>>
>> The Noise Blanker works on AM, but it is masked by the
>> Slow AVC. If
>> you have noise spikes of greater amplitude than the
>> signal, the
>> S-Meter will 'peak detect' it and display an average
>> level. IF the

>> noise is the very short, high amplitude spikes intended to
>> be
>> suppressed by this type of blanker, it will 'punch' holes.
>> However the
>> 'average' signal level is still high because of the
>> carrier, so the
>> S-Meter doesn't drop as dramatically as it does with SSB.
>> Checking the
>> efficacy ofthe NB is easily done by connected a piece of
>> wire to the
>> antenna input, and dragging the other end along a grounded
>> metal
>> surface. The S-Meter drop is dramatic because you're
>> looking at a very
>> low average power.
>>
>> All are part of the 'Drake experience'! :-) Most all of
>> these
>> 'shortcomings' can be 'cured' by replacing the Drake with
>> a shiny new
>> Yaecomwood cable boxfor $4-5k. But that kind of defeats
>> the purpose,
>> doesn't it!!!?!?! :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
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> Yahoo! Groups Links
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13406. Re: [DrakeRadio] Re: MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 18:11:24 UTC
From: Garey Barrell
Topic: 13302 Message: 13406

Andrew -

Good point, although most car speakersin this range are 'door'
speakers and they're even more concerned about depth than we are! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

radiomanL wrote:
> If you have the AC3 or AC4 installed check that there is the space . auto speakers
usually have larger and stronger magnets .
> Andrew
> kd5pnt
>
>

13407. Re: MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 18:57:46 UTC
From: fred
Topic: 13302 Message: 13407

Garey
It's not the clearance , it's the strength of the magnet . I went through that with a hallicrafter . the magnet pulled the supply out of my hands and it was not easy to get it away from the speaker . could not get a good hold on the supply . very little room to work with .
andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Andrew -
>
> Good point, although most car speakersin this range are 'door'
> speakers and they're even more concerned about depth than we are! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> radiomanL wrote:
> > If you have the AC3 or AC4 installed check that there is the space . auto speakers usually have larger and stronger magnets .
> > > Andrew
> > > kd5pnt
> > >
> > >
>

13408. Re: [DrakeRadio] Re: MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 19:56:51 UTC
From: Garey Barrell
Topic: 13302 Message: 13408

Andrew -

Interesting,I wouldn't have thought about that. My guess would be
that the supply would be heavy enough that if you set the speaker on
its back it would come out! Perhaps a tug on the cable.? Sure you
remembered to remove the bottom screws!?! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

fred wrote:
> Garey
> It's not the clearance , it's the strength of the magnet . I went through that with a hallicrafter . the magnet pulled the supply out of my hands and it was not easy to get it away from the speaker . could not get a good hold on the supply . very little room to work with .
> andrew
> kd5pnt
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Andrew -
>>
>> Good point, although most car speakersin this range are 'door'
>> speakers and they're even more concerned about depth than we are! :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> radiomanL wrote:
>>> If you have the AC3 or AC4 installed check that there is the space . auto speakers usually have larger and stronger magnets .
>>> Andrew
>>> kd5pnt
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> Yahoo! Groups Links
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13409. Re: MS4 Replacement Speaker

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-25 20:41:45 UTC
From: fred
Topic: 13302 Message: 13409

Thanks for the tip , I never thought about turning the case on it's back . There were no screws in it yet . was re assembling it after recapping the supply .

andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Andrew -
>
> Interesting,I wouldn't have thought about that. My guess would be
> that the supply would be heavy enough that if you set the speaker on
> its back it would come out! Perhaps a tug on the cable.? Sure you
> remembered to remove the bottom screws!?! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> fred wrote:
> > Garey
> > It's not the clearance , it's the strength of the magnet . I went through that with a hallicrafter . the magnet pulled the supply out of my hands and it was not easy to get it away from the speaker . could not get a good hold on the supply . very little room to work with .
> > andrew
> > kd5pnt
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Andrew -
> >>
> >> Good point, although most car speakersin this range are 'door'
> >> speakers and they're even more concerned about depth than we are! :-)
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> radiomanL wrote:

> >>> If you have the AC3 or AC4 installed check that there is the space . auto speakers usually have larger and stronger magnets .
> >>> Andrew
> >>> kd5pnt
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> > Yahoo! Groups Links
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13410. Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 02:40:49 UTC
From: Dan Galligan
Topic: 13331 Message: 13410

.....But I thought that we "enthusiasts" of Vacuum Tube radios, would enjoy this video, from Western Electric. Pretty nice video presentation, on how vacuum tubes are made. I would have liked it to be a bit more detailed. But, then, it probably wouldn't have been as popular of a show, back when it was produced, had it been much more detailed, than it is. For those who like to reminisce, about these things, enjoy!!!

http://techchannel.att.com/play-video.cfm/2011/12/19/AT&T-Archives-Modern-Aladdins-Lamp

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.

Sent from my iPad.

[Non-text portions of this message have been removed]

13411. Re: [DrakeRadio] Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 03:10:43 UTC
From: Barry
Topic: 13331 Message: 13411

"The electrons would have to bump their way through them like midgets in a subway crowd."

Gotta love the language before political correctness...

Barry - N4BUQ

----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, April 25, 2013 9:40:49 PM
> Subject: [DrakeRadio] Not SPECIFICALLY Drake related......
>
> .....But I thought that we "enthusiasts" of Vacuum Tube radios, would
> enjoy this video, from Western Electric. Pretty nice video
> presentation, on how vacuum tubes are made. I would have liked it to
> be a bit more detailed. But, then, it probably wouldn't have been as
> popular of a show, back when it was produced, had it been much more
> detailed, than it is.
> For those who like to reminisce, about these things, enjoy!!!
>
> http://techchannel.att.com/play-video.cfm/2011/12/19/AT&T-Archives-Modern-Aladdins-Lamp
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest
> in precious metals, like platinum, gold and silver. Personally, I
> choose to invest in blued steel, brass, and copper jacketed lead.
>
> Sent from my iPad.
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13412. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 05:10:29 UTC
From: Richard Knoppow
Topic: 13302 Message: 13412

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, April 25, 2013 11:09 AM
Subject: Re: [DrakeRadio] General Coverage Receiver

> Richard -
>
> Did you try my 'antenna lead dragged on a grounded
> surface' method??
> People go through all sorts of machinations to generates
> short pulses,
> and I'm beginning to wonder if MY receivers are the ONLY
> ones that
> work this way?? I check the NB on every receiver I work on
> using this
> method, and have found only one (TR-4) that needed to be
> adjusted.
>
> 73, Garey - K4OAH
> Glen Allen, VA

I did, using a rough file and small screwdrive. It does work and proved to me that the blanker was not defective, however the method I tried generates a nice spark pulse that sounds much like auto ignition noise and it makes the operation of the blanker very evident. Unfortunately, most of the noise here is power line arcing type noise and nothing is very effective against it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13413. Re: [DrakeRadio] Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 06:00:20 UTC
From: Dan Galligan
Topic: 13331 Message: 13413

Barry,
Yes, it sure has changed, over the years, hasn't it? Often, for the better, but far too often, to the detriment, of the lexicon.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

It's not about the class of the license, the amateur holds.
It's about the class of the amateur, who holds the license.

Sent from my iPad.

On Apr 25, 2013, at 20:10, Barry <n4buq@...> wrote:

> "The electrons would have to bump their way through them like midgets in a subway crowd."
>
> Gotta love the language before political correctness...
>
> Barry - N4BUQ
>
> ----- Original Message -----
>> From: "Dan Galligan" <w3rxo@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Thursday, April 25, 2013 9:40:49 PM
>> Subject: [DrakeRadio] Not SPECIFICALLY Drake related......
>>
>> .....But I thought that we "enthusiasts" of Vacuum Tube radios, would
>> enjoy this video, from Western Electric. Pretty nice video
>> presentation, on how vacuum tubes are made. I would have liked it to
>> be a bit more detailed. But, then, it probably wouldn't have been as
>> popular of a show, back when it was produced, had it been much more
>> detailed, than it is.
>> For those who like to reminisce, about these things, enjoy!!!
>>
>> http://techchannel.att.com/play-video.cfm/2011/12/19/AT&T-Archives-Modern-Aladdins-Lamp
>>
>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>>
>> In tough economic times, it is purported to be beneficial to invest

>> in precious metals, like platinum, gold and silver. Personally, I
>> choose to invest in blued steel, brass, and copper jacketed lead.
>>
>> Sent from my iPad.
>>
>> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

13414. Re: [DrakeRadio] General Coverage Receiver

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 06:19:21 UTC
From: Jim Wiley
Topic: 13302 Message: 13414

There is another way to simulate pulse type noise, particularly "woodpecker" noise, that works well for testing a noise blanker. What I do is insert a swept signal that runs from zero to 110 MHz at a rate that is adjustable from slow (about once a second) to rapid (100 Hz or so). The signal sweeps through the receiver passband so rapidly that it appears as a pulse. Because it is precisely repeatable, and adjustable in signal level from barely there to overwhelmingly loud, this technique makes it easy to optimize a noise blanker. However, there is a caveat - no single noise source can simulate all types of noise. For most applications, however, this method works for me. As always, YMMV. The sweeper I use is an old -hp- 8601A, but pretty much anything that will cover the frequency range should work. I have occasionally seen one of these sweepers at a flea market for $20 or so. Mine was free for the taking - the guy that had it didn't understand all the different ways it could be used.

- Jim, KL7CC

On 4/25/2013 9:10 PM, Richard Knoppow wrote:
>
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...
> <mailto:k4oah%40mindspring.com>>
> To: <DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>>
> Sent: Thursday, April 25, 2013 11:09 AM
> Subject: Re: [DrakeRadio] General Coverage Receiver
>
> > Richard -
> >
> > Did you try my 'antenna lead dragged on a grounded
> > surface' method??
> > People go through all sorts of machinations to generates
> > short pulses,
> > and I'm beginning to wonder if MY receivers are the ONLY
> > ones that
> > work this way?? I check the NB on every receiver I work on
> > using this
> > method, and have found only one (TR-4) that needed to be
> > adjusted.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
>
> I did, using a rough file and small screwdrive. It does

> work and proved to me that the blanker was not defective,
> however the method I tried generates a nice spark pulse that
> sounds much like auto ignition noise and it makes the
> operation of the blanker very evident. Unfortunately, most
> of the noise here is power line arcing type noise and
> nothing is very effective against it.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@... <mailto:dickburk%40ix.netcom.com>
>
>

[Non-text portions of this message have been removed]

13415. Re: [DrakeRadio] Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 14:39:38 UTC
From: Robert Logan
Topic: 13331 Message: 13415

I watched the whole thing. Very, very cool.

Sent from my iPhone

On Apr 26, 2013, at 1:00 AM, Dan Galligan <w3rxo@...> wrote:

Barry,
Yes, it sure has changed, over the years, hasn't it? Often, for the better, but far too often, to the detriment, of the lexicon.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

It's not about the class of the license, the amateur holds.
It's about the class of the amateur, who holds the license.

Sent from my iPad.

On Apr 25, 2013, at 20:10, Barry <n4buq@...> wrote:

> "The electrons would have to bump their way through them like midgets in a subway crowd."
>
> Gotta love the language before political correctness...
>
> Barry - N4BUQ
>
> ----- Original Message -----
>> From: "Dan Galligan" <w3rxo@mac.com>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Thursday, April 25, 2013 9:40:49 PM
>> Subject: [DrakeRadio] Not SPECIFICALLY Drake related......
>>
>> .....But I thought that we "enthusiasts" of Vacuum Tube radios, would
>> enjoy this video, from Western Electric. Pretty nice video
>> presentation, on how vacuum tubes are made. I would have liked it to
>> be a bit more detailed. But, then, it probably wouldn't have been as
>> popular of a show, back when it was produced, had it been much more
>> detailed, than it is.
>> For those who like to reminisce, about these things, enjoy!!!
>>
>> http://techchannel.att.com/play-video.cfm/2011/12/19/AT&T-Archives-Modern-Aladdins-Lamp
>>
>> 73,
>> Dan

>> W3RXO/W6
>> Pomona, CA
>> DM14cb
>>
>> In tough economic times, it is purported to be beneficial to invest
>> in precious metals, like platinum, gold and silver. Personally, I
>> choose to invest in blued steel, brass, and copper jacketed lead.
>>
>> Sent from my iPad.
>>
>> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13416. Re: [DrakeRadio] Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 15:44:43 UTC
From: Greg
Topic: 13331 Message: 13416

Check out these videos, hand made vacuum tubes by Claude Paillard, a French radio amateur (F2FO)

https://www.youtube.com/playlist?list=PL4EAF2CBF503A932B

https://www.youtube.com/watch?v=EzyXMEpq4qw

[Non-text portions of this message have been removed]

13417. Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 16:56:21 UTC
From: John Sehring
Topic: 13417 Message: 13417

Hi Garey,

Yes, been messin' with Drake -4-Line stuff since around 1985. Those Twins are what got me back on the air on HF.

I will carefully follow up your observations about the R-4A (13-tube) and the R-4B.

Your notes & responses are a treasure trove for me. I'm always keenly interested in the "march of mods" in radios & trying to keep up on them. Your CD's certainly have helped a lot on Drakes.

But it does drive a bit batty when those changes are not at all or correctly documented. I spent a few years in the military electronics/avionics game and EVERY change HAD to be on paper. "Configuration control" they called it. Woe unto those who didn't abide!

I don't know offhand who of the classique radio makers did better at that. Some mfrs. showed remarkable stability of circuit design. Hallicrafters comes to mind. And some didn't!

Hallicrafters did play some of the Detroit game of "skin it with some newer sheet metal and call it `completely new'!" E.g. SX-100 -> SX-122.

I don't know if such design stability showed:

A) Very good design, didn't need a bunch of changes, or

B) Stuff was considered just good enough, not too many complaints, and they're still sellin'!

Even the great demi-god Art Collins certainly made enuf changes in, say, the S-Line over the years. I have quite a stack o' papered stuff on that.

As far as buying/using YaeIcoWood radios, I don't have any of them here. Personal rule: I want to be able to fix/service all pieces of gear in my ham shack.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

[Non-text portions of this message have been removed]

13418. Re: Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 17:11:03 UTC
From: fred
Topic: 13331 Message: 13418

HT4 goes to war .

http://www.youtube.com/watch?v=Jps0_2adUvo

if the link does not work search "voice of victory"
kd5pnt

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> .....But I thought that we "enthusiasts" of Vacuum Tube radios, would enjoy this video, from Western Electric. Pretty nice video presentation, on how vacuum tubes are made. I would have liked it to be a bit more detailed. But, then, it probably wouldn't have been as popular of a show, back when it was produced, had it been much more detailed, than it is.
> For those who like to reminisce, about these things, enjoy!!!
>
> http://techchannel.att.com/play-video.cfm/2011/12/19/AT&T-Archives-Modern-Aladdins-Lamp
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver. Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
>
> Sent from my iPad.
>
> [Non-text portions of this message have been removed]
>

13419. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 17:20:45 UTC
From: Richard Knoppow
Topic: 13417 Message: 13419

----- Original Message -----
From: "John Sehring" <wb0eq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 26, 2013 9:56 AM
Subject: [DrakeRadio] Drake R-4* for general coverage

Hi Garey,

Yes, been messin' with Drake -4-Line stuff since around 1985. Those Twins are what got me back on the air on HF.

I will carefully follow up your observations about the R-4A (13-tube) and the R-4B.

Your notes & responses are a treasure trove for me. I'm always keenly interested in the "march of mods" in radios & trying to keep up on them. Your CD's certainly have helped a lot on Drakes.

But it does drive a bit batty when those changes are not at all or correctly documented. I spent a few years in the military electronics/avionics game and EVERY change HAD to be on paper. "Configuration control" they called it. Woe unto those who didn't abide!

I don't know offhand who of the classique radio makers did better at that. Some mfrs. showed remarkable stability of circuit design. Hallicrafters comes to mind. And some didn't!

Hallicrafters did play some of the Detroit game of "skin it with some newer sheet metal and call it `completely new'!" E.g. SX-100 -> SX-122.

I don't know if such design stability showed:

A) Very good design, didn't need a bunch of changes, or

B) Stuff was considered just good enough, not too many complaints, and they're still sellin'!

Even the great demi-god Art Collins certainly made enuf changes in, say, the S-Line over the years. I have quite a stack o' papered stuff on that.

As far as buying/using YaeIcoWood radios, I don't have any of them here. Personal rule: I want to be able to fix/service all pieces of gear in my ham shack.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

The government was a big enough customer to make
demands on suppliers and make them stick. Variations in
designs are common and Hallicrafters was notorious for them.
Some of this came from the exigencies of the market; one
could not spend forever on refining a design so sometimes
quite large things fell through the cracks. Even the very
thoroughly engineered R-390 was rapidly redesigned and
become the R-390A, not because it didn't work well but
because it was difficult to maintain and some features were
found to be unnecessary or to cause more trouble than they
were worth. As an example the voltage regulating method
which generated a tremendous amount of heat.
Consumer gear is somewhat different; the design being
determined largely by what the manufacturer sees as the
market forces. When something is made in sufficient
quantity more effort can be put into refining it before
production but things are still missed, for instance
Toyota's recent problems.
U.S. military handbooks, at least Signal Corps
handbooks, had a correction sheet in the back, usually with
a picture of Connie Rod, asking for corrections or suggested
changes.
Drake seems to have done very well at making equipment
which was well designed for function and was producible. I
have 4B twins which at least meet their original specs and
are generally well made. Drake used a different construction
philosophy than Collins; much lighter and with component
arrangements made primarily for function (almost zero lead
length on some parts, etc) which make it more difficult to
work on in some ways, yet its very reliable and still works
like new after some forty plus years.
Of course, Drake was not a newcomer to the business
when they began to make ham radio equipment, they had made
industrial and military equipment in the past so did not
have to guess at some things.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13420. Re: [DrakeRadio] Re: Not SPECIFICALLY Drake related.....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 17:26:21 UTC
From: Richard Knoppow
Topic: 13331 Message: 13420

----- Original Message -----
From: "fred" <radiomanl@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 26, 2013 10:11 AM
Subject: [DrakeRadio] Re: Not SPECIFICALLY Drake related.....

> HT4 goes to war .
>
> http://www.youtube.com/watch?v=Jps0_2adUvo
>
> if the link does not work search "voice of victory"
> kd5pnt
>

This and a number of other radio related movies are
available at http://www.archive.org including one at the
RCA tube factory. Its pretty murky but shows the hand
assembly of tube elements and large rotating sealing
machines with flames going all over the place. All the stuff
at Archive.org can be downloaded.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13421. (no subject)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 17:27:43 UTC
From: John Sehring
Topic: 13421 Message: 13421

I consider the only two lines of SSB tube-type radios suitable (in stock form) for use on today's HF bands, the Drake Twins (preferrably the ones with the FET PTO, or having one transplanted in) and the Collins S-Line (I think the KWM-2 fits here, too).

I think the primary issue is frequency stability. As the Drake Twins PTO runs around 5 MHz, it's very easy to beat them against WWV 5 MHz. Then use a stable AF oscillator or frequency counter to monitor the beat note between 'em = the drift Take notes & plot them when done.

The later Drake FET PTO, as found in the R-4B for example (Garey: are there variations of this FET PTO, too? If so, which are more stable?) is clearly better than the bi-polar ones. The only plain R-4 (with tube-type PTO) I tested was good for tube type PTO's but nothing to write home about.

Yes, as someone pointed out, Collins cheated quite a bit by having only 200 kHz PTO coverage. I think that gets damn annoying on the wider ham bands. I haven't used my S-Line in so long that I just don't recall its stability.

So to list *relative* pros/cons of the receivers, Collins has much superior selectivity due to mechanical filter. But does not have a noise blanker, passband tuning is clumsily accomplished using a variable frequency BFO (unlike the elegance of 75A* design or the Drakes), has 200 kHz (vs. 500 kHz of Drakes) PTO range, mechanical filter does have quite a bit of ringing (transient response is not so hot) with transients & pulses. In side by sides, the Drake R-4A gives better copy than the 75S-3 under, say, thunderstorm QRN, as the former's bandpass shape is smoother and so rings less.

Drakes have provision for 10 more bands of HF coverage; only a few of the S-Line rx's had the 14-extra bands of frequency coverage capability, the 75S-3C. However, neither can run on the 60m band (coverage gap).

Both have superb AGC

Last but not least, the S-Line's CW mode is a kluge, clearly an afterthought. Mods abound for "improving" it. Drake does proper CW! However, the S-Line was not really a totally ham radio design, but for military & commercial use, so CW not vital.

On tx side, I like 6146's better than sweepers like 6JB6's. S-Line has very sophisticated ALC system, is driven by output tube RF envelope detection, not just grid current draw as the Drakes.

Both radios of course had a notch filter.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

[Non-text portions of this message have been removed]

13422. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 19:26:02 UTC
From: Garey Barrell
Topic: 13417 Message: 13422

John -

I have about 20 years on you on the 4 Line. I go back to the 1-A in 1957.!

Yes, Drake was not the best when it came to field changes. The production changes are fairly well documented by serial number, but even they are not 'perfect'. Unfortunately, those docs cost money, and unless you sell to the gummint, people generally don't care. I just wish I had done my CDs 30 years ago! Would have added years to my life that I lost tracing circuits from one little board to another through those harnesses! Making the CDs has helped me a lot, and I have been able to document changes in a few pieces that were NEVER documented by Drake.

I worked for NASA, and if you changed a soldering iron tip it had to be logged!! :-) Manned flight was the most critical, of course, and was tightly traced and logged fromwhen the silicon and gold were mined, to the transistor and the board it plugged into, all the way up to it's 'final destination'. But it costs money and slows you down considerably. However, when something did go wrong, you could follow the failure all the way back to find out where it went off the rails.

Collins was probably one of the best 'commercial' vendors, at least they documented their changes. The majority of their business was with the government so it was demanded. But it DOES cost money.

As with most things, it's all a matter of trade-offs. Hallicrafter's had some first rate engineers, and some of their circuits were groundbreaking. Unfortunately they did not devote the same amount of effort/$ to components. They essentially used cheap, standard components developed for kitchen radios, and the cheapest mechanical structure that would hold together.

National and Hammarlund manufactured many of their own parts, and held to a considerably higher standard than Halli.

Collins had first rate engineers and 'price is no object' government contracts, and so went with highquality at every opportunity.

Drake came along with excellent and creative engineering, and used a less expensive mechanical approach. Things were bent and assembled rather than machined out of a block. Compare the Collins PTO to the Drake PTO for an excellent example. If I was going to drop it out of a plane, dragit through the mud and/or drive a tank over it, I'd want the Collins. If it's going to sit on a desk in an air conditioned house, the Drake is more than adequate!! I don't think Bob Drake felt

like a patterned material needed to be glued to the front panel of a
radio......

My newest radios are the Kenwood TS-940 (1986) and Drake R-8A (1997).
The Kenwood is repairable by me, but the R-8 is 'iffy'. I think I
could handle it if I could get the parts.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
> Hi Garey,
>
> Yes, been messin' with Drake -4-Line stuff since around 1985. Those Twins are what got me back on the air on HF.
>
> I will carefully follow up your observations about the R-4A (13-tube) and the R-4B.
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> Your notes & responses are a treasure trove for me. I'm always keenly interested in the "march of mods" in radios & trying to keep up on them. Your CD's certainly have helped a lot on Drakes.
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> But it does drive a bit batty when those changes are not at all or correctly documented. I spent a few years in the military electronics/avionics game and EVERY change HAD to be on paper. "Configuration control" they called it. Woe unto those who didn't abide!
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> I don't know offhand who of the classique radio makers did better at that. Some mfrs. showed remarkable stability of circuit design. Hallicrafters comes to mind. And some didn't!
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> Hallicrafters did play some of the Detroit game of "skin it with some newer sheet metal and call it `completely new'!" E.g. SX-100 -> SX-122.
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> I don't know if such design stability showed:
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> Even the great demi-god Art Collins certainly made enuf changes in, say, the S-Line over the years. I have quite a stack o' papered stuff on that.
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> As far as buying/using YaeIcoWood radios, I don't have any of them here. Personal rule: I want to be able to fix/service all pieces of gear in my ham shack.
>
>

> --John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada
>
>

13423. Re: [DrakeRadio] (unknown)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 20:07:00 UTC
From: Garey Barrell
Topic: 13421 Message: 13423

John -

I've documented at least 17 varieties of PTOs, but most variances are the result of device changes to 'newer' types, and power supply decoupling.

The FET PTO first appeared in the Version 2 of the R-4B, s/n 8000. The first 1000 units (7000-7999) used the bipolar PTO. The T-4XB had the bipolar PTO (about 13750, 10/67) and was 'documented' as FET at (16159, 8/69).

The klugey CW was only in the 32S-1. CW was generated by feeding an audio tone to the Mic input with resultant 'extra' signals. The 32S-3 bypassed the Bal Modulator and the filter to the 1st Mixer for CW.

The comparison of the 6146 to the 6JB6 has gone through several iterations over the years. A 'new' 6146 costs just about the same today as a 6JB6. Granted, you can still find used or pull 6146s for less, and thanks to their lower perveance they're more likely to have 'some' life left. The 6JB6 is considerably higher perveance, (ability to draw LARGE currents at relatively low Plate voltages,) one of the main reasons they were chosen, also gives them a much greater ability to melt themselves when run off-resonance or to a mismatched load. Taking care to avoid those two conditions will allow 6JB6s to last just as long as 6146s. I have 15 year old 6JB6s that have had heavy use, and still have full output. A pair of 6146s in a T-4X will do good to put out 100 W, compared to the 140-150W from a pair of 6JB6s. Considering the 'horsepower' race that was underway in the 60's, it's not difficult to see why the 6JB6 was chosen. The 6JB6 cost about $2.80 at retail, I believe $7 for a matched pair from Drake. The 6146 cost about $5, so not a bug cost saving.

Yes, the Collins ALC is 'better' on paper, and works very well. However, I doubt seriously that someone could tell the difference between it and the Grid current sensing of the T-4X by listening to the signal. A two-tone test on the T-4X shows a nice clean waveform, and only very slight flat-topping as the Grid 'runs out of room.'

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John Sehring wrote:
> The later Drake FET PTO, as found in the R-4B for example (Garey: are there variations of

this FET PTO, too? If so, which are more stable?) is clearly better than the bi-polar ones. The only plain R-4 (with tube-type PTO) I tested was good for tube type PTO's but nothing to write home about.
>
> Last but not least, the S-Line's CW mode is a kluge, clearly an afterthought. Mods abound for "improving" it. Drake does proper CW! However, the S-Line was not really a totally ham radio design, but for military & commercial use, so CW not vital.
>
> On tx side, I like 6146's better than sweepers like 6JB6's. S-Line has very sophisticated ALC system, is driven by output tube RF envelope detection, not just grid current draw as the Drakes.
>

13424. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 20:16:53 UTC
From: w7fe
Topic: 13417 Message: 13424

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 26, 2013 10:20 AM
Subject: Re: [DrakeRadio] Drake R-4* for general coverage

> U.S. military handbooks, at least Signal Corps
> handbooks, had a correction sheet in the back, usually > with a picture of
> Connie Rod, asking for corrections or > suggested changes.

OK, Richard -- I went through the Army's electronics and radar training school at Redstone Arsenal Alabama in 1967-68, spent a few years in general support for the Army's Hawk system (predecessor of the Patriot), and saw a lot of manuals -- but I don't know who/what "Connie Rod" is/was. Maybe he/she was unique to the Signal Corps?

Important stuff. -- please 'splain. <grin>.

73 de Stu W7FE
Henderson, NV

13425. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 20:22:45 UTC
From: Garey Barrell
Topic: 13417 Message: 13425

Hey Stu-

We must have crossed paths! I was in the Astrionics building with
NASA from 1962 - 1971. You ever get over to Electronic Wholesalers?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w7fe wrote:
> OK, Richard -- I went through the Army's electronics and radar training
> school at Redstone Arsenal Alabama in 1967-68, spent a few years in general
> support for the Army's Hawk system (predecessor of the Patriot), and saw a
> lot of manuals -- but I don't know who/what "Connie Rod" is/was. Maybe
> he/she was unique to the Signal Corps?
>
> Important stuff. -- please 'splain. <grin>.
>
> 73 de Stu W7FE
> Henderson, NV
>
>

13426. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 20:39:52 UTC
From: Dino Papas
Topic: 13417 Message: 13426

Do you remember "P.S. Magazine"? Think that's where Connie resided as I recall.

Dino KL0S

On Apr262013, at 1616 PM, w7fe <w7fe@...> wrote:

>
> ----- Original Message -----
> From: "Richard Knoppow" <1oldlens1@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 26, 2013 10:20 AM
> Subject: Re: [DrakeRadio] Drake R-4* for general coverage
>
> > U.S. military handbooks, at least Signal Corps
> > handbooks, had a correction sheet in the back, usually > with a picture of
> > Connie Rod, asking for corrections or > suggested changes.
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> he/she was unique to the Signal Corps?
>
> Important stuff. -- please 'splain. <grin>.
>
> 73 de Stu W7FE
> Henderson, NV

[Non-text portions of this message have been removed]

13427. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 21:04:05 UTC
From: DRogers
Topic: 13417 Message: 13427

Just FYI:

About the last 10 years of P.S. Magazine, the Preventive Maintenance Monthly, is available from Logsa:

https://www.logsa.army.mil/psmag/archive2013.cfm

About the first 10 years (from the '40's through the '50's) is available from the Digital Comics Museum (a British website) here:

http://digitalcomicmuseum.com/index.php?ACT=dosearch

You can download pdf copies from the Logsa site and read them on the Digital Comics site. To download from the Digital Comics site, you have to register, which is free and obligation free.

They don't have much Drake info, but do occasionally have military radio info.

Growing up in the Army in the '50's, these magazines were like comic books to me.

David, WA7ZYQ
St Maries, Idaho

----- Original Message -----
From: Dino Papas
To: DrakeRadio@yahoogroups.com
Sent: Friday, April 26, 2013 1:39 PM
Subject: Re: [DrakeRadio] Drake R-4* for general coverage

Do you remember "P.S. Magazine"? Think that's where Connie resided as I recall.

Dino KL0S

On Apr262013, at 1616 PM, w7fe <w7fe@...> wrote:

>
> ----- Original Message -----
> From: "Richard Knoppow" <1oldlens1@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 26, 2013 10:20 AM
> Subject: Re: [DrakeRadio] Drake R-4* for general coverage
>
> > U.S. military handbooks, at least Signal Corps
> > handbooks, had a correction sheet in the back, usually > with a picture of
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> OK, Richard -- I went through the Army's electronics and radar training
> school at Redstone Arsenal Alabama in 1967-68, spent a few years in general

> support for the Army's Hawk system (predecessor of the Patriot), and saw a
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> he/she was unique to the Signal Corps?
>
> Important stuff. -- please 'splain. <grin>.
>
> 73 de Stu W7FE
> Henderson, NV

[Non-text portions of this message have been removed]

13428. Re: [DrakeRadio] Drake R-4* for general coverage

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 01:49:06 UTC
From: Richard Knoppow
Topic: 13417 Message: 13428

```
----- Original Message -----
From: "w7fe" <w7fe@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, April 26, 2013 1:16 PM
Subject: Re: [DrakeRadio] Drake R-4* for general coverage

>
> ----- Original Message -----
> From: "Richard Knoppow" <1oldlens1@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, April 26, 2013 10:20 AM
> Subject: Re: [DrakeRadio] Drake R-4* for general coverage
>
>> U.S. military handbooks, at least Signal Corps
>> handbooks, had a correction sheet in the back, usually >
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>> changes.
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> school at Redstone Arsenal Alabama in 1967-68, spent a few
> years in general
> support for the Army's Hawk system (predecessor of the
> Patriot), and saw a
> lot of manuals -- but I don't know who/what "Connie Rod"
> is/was. Maybe
> he/she was unique to the Signal Corps?
>
> Important stuff. -- please 'splain. <grin>.
>
> 73 de Stu W7FE
> Henderson, NV
>
Do a Google search for Connie Rodd (correct spelling
this time).

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

13429. Kids, don't try this at home!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 02:11:58 UTC
From: Steve Wedge
Topic: 13429 Message: 13429

I was reassembling an R-4A that had undergone the strip-sink-oven treatment and apparently, I've gotten way too used to R-4B's.

I switched the 0B2 and 6EH5 and, unfortunately, fired it up! Heard crackling and cut it off IMMEDIATELY!

I immediately saw my transgression (it wasn't hard: the 0B2 was glowing like Chernobyl!) and swapped the tubes. Re-powered and - miracle or miracles - the receiver was working fine!

Yeah - I have to replace the plate resistor for the audio output: it's got a nice swollen part in the middle but still measures 325 ohms.

Word to the wise. There are TWO tall, 7-pin tubes in an R-4A!

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13430. Re: [DrakeRadio] Kids, don't try this at home!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 02:22:17 UTC
From: Steve Wedge
Topic: 13429 Message: 13430

And, yes, the PTO is working and stable!

Thought I might have fried the zener but there's no evidence of any problem in that area.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Wedge
Sent: Friday, April 26, 2013 10:11 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Kids, don't try this at home!

I was reassembling an R-4A that had undergone the strip-sink-oven treatment and apparently, I've gotten way too used to R-4B's.

I switched the 0B2 and 6EH5 and, unfortunately, fired it up! Heard crackling and cut it off IMMEDIATELY!

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73,

Steve Wedge, W1ES/4

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13431. Re: [DrakeRadio] Kids, don't try this at home!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 13:07:35 UTC
From: Garey Barrell
Topic: 13429 Message: 13431

Yeah, you lucked out..... Nominal Zener dissipation is about 0.2W.
Leaving out the 0B2 only doubles it to 0.4W, and it's a 0.5W Zener.

Better lucky than good!! :-) Lucky you didn't take out the output
transformer.

When all else fails..... RTFM! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> And, yes, the PTO is working and stable!
>
> Thought I might have fried the zener but there's no evidence of any problem in that area.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Steve Wedge
> Sent: Friday, April 26, 2013 10:11 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Kids, don't try this at home!
>
>
>
> I was reassembling an R-4A that had undergone the strip-sink-oven treatment and
apparently, I've gotten way too used to R-4B's.
>
> I switched the 0B2 and 6EH5 and, unfortunately, fired it up! Heard crackling and cut it
off IMMEDIATELY!
>
> I immediately saw my transgression (it wasn't hard: the 0B2 was glowing like Chernobyl!)
and swapped the tubes. Re-powered and - miracle or miracles - the receiver was working
fine!
>

> Yeah - I have to replace the plate resistor for the audio output: it's got a nice swollen part in the middle but still measures 325 ohms.
>
> Word to the wise. There are TWO tall, 7-pin tubes in an R-4A!
>
>

13432. Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 14:20:19 UTC
From: de_n7ioh
Topic: 13432 Message: 13432

There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a buy it now price of $69.97 plus shipping. The item ships from Pennsylvania and to me in Arizona the shipping is listed as $15.67 so it should be less if you are closer. For me that comes out to $0.344 a foot a very good price.

Al, n7ioh
Payson, Arizona, USA

13433. 6JB6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 14:30:01 UTC
From: John Sehring
Topic: 5203 Message: 13433

Yes, and high perveance tube allows relaxed B+ voltage requirements, too. Lower B+ all around = less expensive circuit (lower voltage ratings needed on components) & more reliability, too. Another sign of that is use of 6EH5 in audio output, rather than, say, a 6AQ5. Collins S-Line used 6BF5 there, betcha it's a low perveance too..

I too have 6JB6s from decades ago, not abused, still give decent output. It's all about care & feeding of 'em.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

The comparison of the 6146 to the 6JB6 has gone through several iterations over the years. A 'new' 6146 costs just about the same today as a 6JB6. Granted, you can still find used or pull 6146s for less, and thanks to their lower perveance they're more likely to have 'some' life left. The 6JB6 is considerably higher perveance, (ability to draw LARGE currents at relatively low Plate voltages,) one of the main reasons they were chosen, also gives them a much greater ability to melt themselves when run off-resonance or to a mismatched load.

13434. RE: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 16:04:20 UTC
From: Terrell Hamilton
Topic: 13432 Message: 13434

Ah, if only RG-8 would sell for that price...

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of de_n7ioh
Sent: Saturday, April 27, 2013 7:20 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a buy it now price of $69.97 plus shipping. The item ships from Pennsylvania and to me in Arizona the shipping is listed as $15.67 so it should be less if you are closer. For me that comes out to $0.344 a foot a very good price.

Al, n7ioh
Payson, Arizona, USA

[Non-text portions of this message have been removed]

13435. Dayton 2013

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 16:38:34 UTC
From: k5fex
Topic: 13435 Message: 13435

Will there be a Drake forum this year? And if so, when? This will be first visit to Hamvention. Looking forward to it.

73
Wayne K5FEX

13436. Re: [DrakeRadio] Dayton 2013

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 16:41:04 UTC
From: Dino Papas
Topic: 13435 Message: 13436

Check out the forums list at:

http://www.hamvention.org/forums.php

Yes, there will be a Drake forum!

Dino KL0S

On Apr272013, at 1238 PM, k5fex <oilieone@...> wrote:

> Will there be a Drake forum this year? And if so, when? This will be first visit to Hamvention. Looking forward to it.
>
> 73
> Wayne K5FEX

[Non-text portions of this message have been removed]

13437. TR-7 trade towards or for R-7 or R-8 RX?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 17:34:24 UTC
From: W7VH
Topic: 13437 Message: 13437

Hi,

My 2nd TR-7 is on ebay for a few more days but if it doesn't sell,
I've got a wild hare to have an R-7 (or R-8) to work with the
TR-7 I'm keeping. I'm thinking of trying to trade my 2nd
TR-7 for or towards a nice R-7 or R-8 RX. See my description
in my post asking what it's worth from a few days ago.

On a related subject. It's not really clear to me from the
manual but is it possible to share the same antenna between a TR-7
and an another RX without an external TR/RX relay?

Let me know if any of you are interested in such a trade?

Thanks,

Jon
W7VH

13438. Re: [DrakeRadio] Dayton 2013

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 18:23:09 UTC
From: Chgypsy@...
Topic: 13435 Message: 13438

oilieone@... writes:

Will there be a Drake forum this year? And if so, when? This will be
first visit to Hamvention. Looking forward to it. Wayne K5FEX

Welcome to Dayton,
Just search Dayton Hamvention 2013
Drake Forum schedule (under affiliated events) is on line but in any case
Sat.10:30 AM Room 2.

It really helps if you go online and have some idea of what the layouts
are. The layout will be printed in the Hamvention brochure which you should
obtain when you go into the main entrances.
Have fun. Carl wd8nhk

[Non-text portions of this message have been removed]

13439. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 18:36:31 UTC
From: William Houghton
Topic: 13432 Message: 13439

Is this the cable used to connect T-4X's to R-4's?

From: de_n7ioh <wendy101@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, April 27, 2013 7:20:24 AM
Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a buy it now price of $69.97 plus shipping. The item ships from Pennsylvania and to me in Arizona the shipping is listed as $15.67 so it should be less if you are closer. For me that comes out to $0.344 a foot a very good price.

Al, n7ioh
Payson, Arizona, USA

[Non-text portions of this message have been removed]

13440. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 19:37:00 UTC
From: Garey Barrell
Topic: 13432 Message: 13440

It's needed only for the INJ cable through the B Line. 3' long! You
need two of these for the INJ and the CAR OSC for the C-Line, total of
six feet....

It would be great if ONE person could buy the 250' and we'd never need
any more for the list! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Is this the cable used to connect T-4X's to R-4's?
>
>
>
>
> _____
> From: de_n7ioh <wendy101@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, April 27, 2013 7:20:24 AM
> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
>
>
> There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a
> buy it now price of $69.97 plus shipping. The item ships from Pennsylvania and
> to me in Arizona the shipping is listed as $15.67 so it should be less if you
> are closer. For me that comes out to $0.344 a foot a very good price.
>
>
> Al, n7ioh
> Payson, Arizona, USA
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13441. RE: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 20:10:43 UTC
From: Terrell Hamilton
Topic: 13432 Message: 13441

Hey, Garey -

There has been a lot of discussion over the past several years about where to get and how to make these injection cables - mine are original and seem to be holding up well - do these things deteriorate with time? If so, how often should you replace them? If they deteriorate, is it from physical damage, or from changing impedance or other electrical problems?

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Saturday, April 27, 2013 12:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

It's needed only for the INJ cable through the B Line. 3' long! You
need two of these for the INJ and the CAR OSC for the C-Line, total of
six feet....

It would be great if ONE person could buy the 250' and we'd never need
any more for the list! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Is this the cable used to connect T-4X's to R-4's?
>
>
>
>
> _____
> From: de_n7ioh <wendy101@... <mailto:wendy101%40gmx.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Sat, April 27, 2013 7:20:24 AM
> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
>
>
> There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a
> buy it now price of $69.97 plus shipping. The item ships from Pennsylvania and

> to me in Arizona the shipping is listed as $15.67 so it should be less if you
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>
> Al, n7ioh
> Payson, Arizona, USA
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13442. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 20:23:34 UTC
From: Garey Barrell
Topic: 13432 Message: 13442

Hi Terry -

They seem to get stiff after many years, I guess all the plasticizer leaches out of the jacket. I don't know if it migrates into the internal poly insulator like coax, or if it just goes into the atmosphere..... YIKES! nobody tell the EPA...

I've used the stiff ones because they were the right shape, and have never noticed a degradation. I always touch up the INJ tuning with the units cabled together, and that seems to give the least variation in RF TUNE and PRESELECTOR when switching from RCVR to XMTR control.

I guess it could get to the point where the outer jacket cracks, perhaps letting moisture in, but I've not seen any that bad. All the rest of the cables are just audio grade, and unless the wire breaks or someone steps on a connector they don't go bad.

While I've never felt the need to replacean INJ, I've made new ones, and it certainly can't hurt as long as you're using 8421. Some insiston RG-62 which is bulky, difficult to work with and prone to shorting if bent too sharply. RG-59 'will work', but it's bulky as well. Neither is much of a problem, but I like to set up the twins with the speaker between them and thefatter cables have to be considerably longer to avoid sharp bends.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Hey, Garey -
>
>
>
> There has been a lot of discussion over the past several years about where to get and how to make these injection cables - mine are original and seem to be holding up well - do these things deteriorate with time? If so, how often should you replace them? If they deteriorate, is it from physical damage, or from changing impedance or other electrical problems?
>
>
>
> Terry K7WLD
>

> Wenatchee, WA
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
> Sent: Saturday, April 27, 2013 12:37 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
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>
> It's needed only for the INJ cable through the B Line. 3' long! You
> need two of these for the INJ and the CAR OSC for the C-Line, total of
> six feet....
>
> It would be great if ONE person could buy the 250' and we'd never need
> any more for the list! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
>> Is this the cable used to connect T-4X's to R-4's?
>>
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>> _____
>> From: de_n7ioh <wendy101@... <mailto:wendy101%40gmx.com> >
>> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>> Sent: Sat, April 27, 2013 7:20:24 AM
>> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
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>> There is just listed on Ebay two new 250 foot reels of Belden 8421 cable with a
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>> Al, n7ioh
>> Payson, Arizona, USA
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13443. Re: [DrakeRadio] TR-7 trade towards or for R-7 or R-8 RX?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 20:39:24 UTC
From: Jim Shorney
Topic: 13437 Message: 13443

On Sat, 27 Apr 2013 17:34:24 -0000, W7VH wrote:

>On a related subject. It's not really clear to me from the
>manual but is it possible to share the same antenna between a TR-7
>and an another RX without an external TR/RX relay?

Yes, the R-7 does just that via the RX antenna loop connectors on the rear panel of the TR-7. The R-7 has an antenna splitter built in to allow operation of both receivers from the same antenna (with a 3 dB penalty for splitting the signal). In theory, you could use this loop with any receiver, and incorporate your own splitter and even a preamp if desired. My future plans include putting a vintage Ameco tube preamp/preselector, which has it's own auxiliary receiver output, in the loop between the TR-7 and R-7.

The only drawback of this method (other than the 3 dB penalty) is that the Receive antenna line is pulled out of the TR-7 after the low pass filter, so signals higher in frequency than the bandwitch segment selected on the TR-7 will be attenuated.

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13444. High perveance tubes - 6JB6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 21:39:23 UTC
From: John Sehring
Topic: 13444 Message: 13444

Perhaps I wasn't clear...

Being able to run a radio at lower B+ voltage (by use of high perveance tubes) can reduce voltage stress all around on insulation systems and passive components, for example. Can translate into longer life.

Collins did same with KWM-2 & S-Line.

And no, sweep tubes wouldn't necessary last longer. And yes, tune up needs to be fast to avoid cookin' 'em.

I think TV (tube-type) mfrs asked for this from tube mfrs for same reason.

Sweep tubes in TVs take a terrible beating! I recall my uncle had a very early DuMont TV, believe it used 807's in sweep section!

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

==========
>From: K9sqg <k9sqg@...>
>To: wb0eq@...
>Sent: Saturday, April 27, 2013 9:58 AM
>Subject: 6JB6 reliability
>
>
>
>John,
>
>
>Not sure I totally agree with your comments about lower voltage 6JB6 equates with higher reliability. The tubes are intolerant of excessive current except for a few seconds and heat up quite quickly. That is part of the reason that their input/output is so much lower on AM than SSB. Tuning the final tank circuit on a B or C line has to be done very quickly; a chart of settings for each band helps. But there are a lot of newbies out there that don't comprehend what "dipping the finals" is all about. After replacing a set of finals the lesson is often learned, hi hi. So in theory, the tubes might last longer than their higher voltage counterparts but, functionally, in practice, that depends on user awareness of proper operation.
>
>
>Enjoy those Drakes.
>
>
>73,
>
>
>Evan, K9SQG

>
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>========================
>
>
>Yes, and high perveance tube allows relaxed B+ voltage requirements, too. Lower B+ all around = less expensive circuit (lower voltage ratings needed on components) & more reliability, too. Another sign of that is use of 6EH5 in audio output, rather than, say, a 6AQ5. Collins S-Line used 6BF5 there, betcha it's a low perveance too..
>
>I too have 6JB6s from decades ago, not abused, still give decent output. It's all about care & feeding of 'em.

13445. 2bRadioParts.com

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 21:44:10 UTC
From: John Sehring
Topic: 13445 Message: 13445

From: 2bRadioParts.com

Interesting web site.

>>From: "2B Radio Parts, LLC" <2bradioparts@...>
>>To: John Sehring <wb0eq@...>
>>Sent: Thursday, April 25, 2013 4:24 AM
>>Subject: Re: Drake
>>
>>Hi John:

>>Yes we are well and still provide replacement repair parts for the older Drake gear.
But not parts for AC-3 nor AC-4 power supplies.
>>
>>
>>We recently made another small production run of the C-Line dial windows of which we had
been out of for months.
>>
>>
>>Thanks for your inquiry.
>>
>>
>>Regards, Donnie Garrett / WA9TGT
>>

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

13446. Re: [DrakeRadio] Kids, don't try this at home!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 22:25:02 UTC
From: Steve Wedge
Topic: 13429 Message: 13446

That xformer was hummin'!

Receiver was playing great all last night. I will replace. The resistor, as this rig will be sold soon.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Apr 27, 2013, at 9:07 AM, Garey Barrell <k4oah@mindspring.com> wrote:

> Yeah, you lucked out..... Nominal Zener dissipation is about 0.2W.
> Leaving out the 0B2 only doubles it to 0.4W, and it's a 0.5W Zener.
>
> Better lucky than good!! :-) Lucky you didn't take out the output
> transformer.
>
> When all else fails........ RTFM! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
> > And, yes, the PTO is working and stable!
> >
> > Thought I might have fried the zener but there's no evidence of any problem in that area.
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
> >
> >
> > All my computers have my signature with various pearls of wisdom appended thereto.
> >
> >
> >
> > From: Steve Wedge
> > Sent: Friday, April 26, 2013 10:11 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: [DrakeRadio] Kids, don't try this at home!
> >

> >
> >
> > I was reassembling an R-4A that had undergone the strip-sink-oven treatment and apparently, I've gotten way too used to R-4B's.
> >
> > I switched the 0B2 and 6EH5 and, unfortunately, fired it up! Heard crackling and cut it off IMMEDIATELY!
> >
> > I immediately saw my transgression (it wasn't hard: the 0B2 was glowing like Chernobyl!) and swapped the tubes. Re-powered and - miracle or miracles - the receiver was working fine!
> >
> > Yeah - I have to replace the plate resistor for the audio output: it's got a nice swollen part in the middle but still measures 325 ohms.
> >
> > Word to the wise. There are TWO tall, 7-pin tubes in an R-4A!
> >
> >
>
>

[Non-text portions of this message have been removed]

13447. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 22:47:59 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 13447

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /3502RA_SERIES_CD.pdf
Uploaded by : radiomanradioman <radiomanl@...>
Description : right angle phono connector

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/3502RA_SERIES_CD.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

radiomanradioman <radiomanl@...>

13448. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-27 23:45:16 UTC
From: elespe@...
Topic: 13432 Message: 13448

I did and so far have 190 ft left
I did not get it that cheap but considering the investment I think my
selling price for 50 cents a foot plus postage is pretty generous, put in
box, take to post office.
ny takers?
Buy a AC-4 rebuild kit and I'll include 6 ft for FREE. Today only
Paul K0UYA

> It's needed only for the INJ cable through the B Line. 3' long! You
> need two of these for the INJ and the CAR OSC for the C-Line, total of
> six feet....
>
> It would be great if ONE person could buy the 250' and we'd never need
> any more for the list! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
>> Is this the cable used to connect T-4X's to R-4's?
>>
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>>
>>
>> _____
>> From: de_n7ioh <wendy101@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Sat, April 27, 2013 7:20:24 AM
>> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
>>
>>
>> There is just listed on Ebay two new 250 foot reels of Belden 8421 cable
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>> buy it now price of $69.97 plus shipping. The item ships from
>> Pennsylvania and
>> to me in Arizona the shipping is listed as $15.67 so it should be less
>> if you
>> are closer. For me that comes out to $0.344 a foot a very good price.
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>>
>> Al, n7ioh

>> Payson, Arizona, USA
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13449. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-28 00:28:01 UTC
From: Steve Wedge
Topic: 13432 Message: 13449

Paul, I'll take 21 ft. Let me know how to pay...

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Apr 27, 2013, at 7:45 PM, elespe@... wrote:

> I did and so far have 190 ft left
> I did not get it that cheap but considering the investment I think my
> selling price for 50 cents a foot plus postage is pretty generous, put in
> box, take to post office.
> ny takers?
> Buy a AC-4 rebuild kit and I'll include 6 ft for FREE. Today only
> Paul K0UYA
>
> > It's needed only for the INJ cable through the B Line. 3' long! You
> > need two of these for the INJ and the CAR OSC for the C-Line, total of
> > six feet....
> >
> > It would be great if ONE person could buy the 250' and we'd never need
> > any more for the list! :-)
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > William Houghton wrote:
> >> Is this the cable used to connect T-4X's to R-4's?
> >>
> >>
> >>
> >>
> >> _____
> >> From: de_n7ioh <wendy101@...m>
> >> To: DrakeRadio@yahoogroups.com
> >> Sent: Sat, April 27, 2013 7:20:24 AM
> >> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
> >>
> >>
> >> There is just listed on Ebay two new 250 foot reels of Belden 8421 cable
> >> with a
> >> buy it now price of $69.97 plus shipping. The item ships from

> >> Pennsylvania and
> >> to me in Arizona the shipping is listed as $15.67 so it should be less
> >> if you
> >> are closer. For me that comes out to $0.344 a foot a very good price.
> >>
> >>
> >> Al, n7ioh
> >> Payson, Arizona, USA
> >>
> >>
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> >>
> >> [Non-text portions of this message have been removed]
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13450. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-28 01:51:27 UTC
From: elespe@...
Topic: 13432 Message: 13450

Thanks Steve
I'll get back to you Monday
Paul
> Paul, I'll take 21 ft. Let me know how to pay...
>
> Steve Wedge, W1ES/4
>
> Sent from my iPad: please don't laugh too hard at any autocorrect grammar
> changes :)
>
> On Apr 27, 2013, at 7:45 PM, elespe@... wrote:
>
>> I did and so far have 190 ft left
>> I did not get it that cheap but considering the investment I think my
>> selling price for 50 cents a foot plus postage is pretty generous, put
>> in
>> box, take to post office.
>> ny takers?
>> Buy a AC-4 rebuild kit and I'll include 6 ft for FREE. Today only
>> Paul K0UYA
>>
>> > It's needed only for the INJ cable through the B Line. 3' long! You
>> > need two of these for the INJ and the CAR OSC for the C-Line, total of
>> > six feet....
>> >
>> > It would be great if ONE person could buy the 250' and we'd never need
>> > any more for the list! :-)
>> >
>> > 73, Garey - K4OAH
>> > Glen Allen, VA
>> >
>> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> > and TR-4/C Service Supplement CDs
>> > <www.k4oah.com>
>> >
>> > William Houghton wrote:
>> >> Is this the cable used to connect T-4X's to R-4's?
>> >>
>> >>
>> >>
>> >>
>> >> _____
>> >> From: de_n7ioh <wendy101@...>
>> >> To: DrakeRadio@yahoogroups.com
>> >> Sent: Sat, April 27, 2013 7:20:24 AM

>> >> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
>> >>
>> >>
>> >> There is just listed on Ebay two new 250 foot reels of Belden 8421
>> cable
>> >> with a
>> >> buy it now price of $69.97 plus shipping. The item ships from
>> >> Pennsylvania and
>> >> to me in Arizona the shipping is listed as $15.67 so it should be
>> less
>> >> if you
>> >> are closer. For me that comes out to $0.344 a foot a very good price.
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>> >>
>> >> Al, n7ioh
>> >> Payson, Arizona, USA
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13451. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-28 02:01:59 UTC
From: Steve Wedge
Topic: 13432 Message: 13451

Works for me. No rush.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Apr 27, 2013, at 9:51 PM, elespe@... wrote:

> Thanks Steve
> I'll get back to you Monday
> Paul
> > Paul, I'll take 21 ft. Let me know how to pay...
> >
> > Steve Wedge, W1ES/4
> >
> > Sent from my iPad: please don't laugh too hard at any autocorrect grammar
> > changes :)
> >
> > On Apr 27, 2013, at 7:45 PM, elespe@... wrote:
> >
> >> I did and so far have 190 ft left
> >> I did not get it that cheap but considering the investment I think my
> >> selling price for 50 cents a foot plus postage is pretty generous, put
> >> in
> >> box, take to post office.
> >> ny takers?
> >> Buy a AC-4 rebuild kit and I'll include 6 ft for FREE. Today only
> >> Paul K0UYA
> >>
> >> > It's needed only for the INJ cable through the B Line. 3' long! You
> >> > need two of these for the INJ and the CAR OSC for the C-Line, total of
> >> > six feet....
> >> >
> >> > It would be great if ONE person could buy the 250' and we'd never need
> >> > any more for the list! :-)
> >> >
> >> > 73, Garey - K4OAH
> >> > Glen Allen, VA
> >> >
> >> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> > and TR-4/C Service Supplement CDs
> >> > <www.k4oah.com>
> >> >
> >> > William Houghton wrote:
> >> >> Is this the cable used to connect T-4X's to R-4's?
> >> >>

> >> >>
> >> >>
> >> >>
> >> >> _____
> >> >> From: de_n7ioh <wendy101@...>
> >> >> To: DrakeRadio@yahoogroups.com
> >> >> Sent: Sat, April 27, 2013 7:20:24 AM
> >> >> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
> >> >>
> >> >>
> >> >> There is just listed on Ebay two new 250 foot reels of Belden 8421
> >> cable
> >> >> with a
> >> >> buy it now price of $69.97 plus shipping. The item ships from
> >> >> Pennsylvania and
> >> >> to me in Arizona the shipping is listed as $15.67 so it should be
> >> less
> >> >> if you
> >> >> are closer. For me that comes out to $0.344 a foot a very good price.
> >> >>
> >> >>
> >> >> Al, n7ioh
> >> >> Payson, Arizona, USA
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13452. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-28 18:23:31 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 13452

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

13453. Recapping Service

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-28 23:41:32 UTC
From: Steve Wedge
Topic: 13453 Message: 13453

Just thought I'd drop a note in as I finish up an alignment: I will re-cap your R-4x receiver for a flat rate plus shipping. I use Hayseed Hamfest parts and check out the rig's performance after installation. This replaces ALL electrolytic capacitors in the rig.

I'll also rebuild your AC-4 or re-cap T-4any and TR-4any.

Contact me off-list for particulars...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13454. Trade: B twins for C-4 console / Power Master

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 00:05:56 UTC
From: vacuuminded2@...
Topic: 13454 Message: 13454

I am looking for a nice condition Drake C-4 console, very preferably with the Power Master accessory and antenna switch control. I have available for haggling, a very nice pair of B line twins. This would include R-4B, T-4XB, and AC-4 installed in the MS-4 speaker cabinet. Completely stock, worked fine when placed on the shelf a couple years ago but I can go through them and align if requested/necessary. Cosmetics are a conservative 8.5 out of 10, (I'm picky), I will gladly take pictures for anybody with serious interest looking to trade.

Regards,
Chris kc9ieq
815-508-1212 cell/text

Sent from my outdated iPhone wireless thingy

13455. Re: [DrakeRadio] Trade: B twins for C-4 console / Power Master

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 01:53:27 UTC
From: amfone
Topic: 13454 Message: 13455

Hello

Last I knew W4FMS has one for sale and it is listed on QTH.
73 Tim

WB8UHZ

From: "vacuuminded2@yahoo.com" <vacuuminded2@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Sunday, April 28, 2013 8:05 PM
Subject: [DrakeRadio] Trade: B twins for C-4 console / Power Master

I am looking for a nice condition Drake C-4 console, very preferably with the Power Master accessory and antenna switch control. I have available for haggling, a very nice pair of B line twins. This would include R-4B, T-4XB, and AC-4 installed in the MS-4 speaker cabinet. Completely stock, worked fine when placed on the shelf a couple years ago but I can go through them and align if requested/necessary. Cosmetics are a conservative 8.5 out of 10, (I'm picky), I will gladly take pictures for anybody with serious interest looking to trade.

Regards,
Chris kc9ieq
815-508-1212 cell/text

Sent from my outdated iPhone wireless thingy

[Non-text portions of this message have been removed]

13456. Issue Tuning a T-4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 02:18:53 UTC
From: kf5str
Topic: 13456 Message: 13456

Hello -

I recently acquired a T-4XC / R-4B station and seem to be having a problem getting the transmitter tuned. This
is my first tube set and have no prior experience with them. Im having trouble getting past step b from the owner's manual
where I'm trying to dip the plate current. The instructions say to advance the gain to 12 o'clock, then adjust the
plate control for a plate current dip. Problem is Im not seeing the dip. Is there something missing or that Im supposed to
be doing that is not covered in the manual?

Thanks!

13457. Re: [DrakeRadio] Issue Tuning a T-4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 03:06:46 UTC
From: Garey Barrell
Topic: 13456 Message: 13457

Have you set the idle biasper Section 3-3 of the manual? That must be done first. Then be certain that you have a dummy load (preferable) or a known resonant antenna for the frequency in use, along with a wattmeter or other type of output indicator.

Go to Section 3-4, and preset all the controls as described. THEN _readthrough the entire Section 3-6_to be sure you understand what you are going to do. The PA tubes in the T-4XC are very easily destroyed by improper _or SLOW_ tuning. They're also expensive!

Do Section 3-6, para A exactly as described. If the transmitter does not react exactly as described in any way, switch back toSSB immediately and figure out why. Check dummy load, coax, or antenna and if ok then try again. If still no luck, you may need some help to determine what is wrong.

IF you are able to dip the PLATE current, but see no output when you push in on the LOADcontrol, you may have a fault in the transmitter. Check for output with an external wattmeter or SWR meter.

Again, I can't stress enoughthat expensive damage can be done in under a minute if something is not right. ANY time you do not get a DIP in plate current when adjusting the PLATE control, something is wrong.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

kf5str wrote:
> Hello -
>
> I recently acquired a T-4XC / R-4B station and seem to be having a problem getting the transmitter tuned. This
> is my first tube set and have no prior experience with them. Im having trouble getting past step b from the owner's manual
> where I'm trying to dip the plate current. The instructions say to advance the gain to 12 o'clock, then adjust the
> plate control for a plate current dip. Problem is Im not seeing the dip. Is there something missing or that Im supposed to
> be doing that is not covered in the manual?
>
> Thanks!
>
>

13458. L4B repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 03:19:14 UTC
From: Allen Epling
Topic: 13458 Message: 13458

I have a Drake L4B that sustained damage to the Metering Circuit Board. I believe it is beyond repair. Does anyone know how to replace it or where I can get help repairing it?

13459. Re: [DrakeRadio] L4B repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 04:00:36 UTC
From: elespe@...
Topic: 13458 Message: 13459

I can repair it or make a clone
Paul K0UYA
> I have a Drake L4B that sustained damage to the Metering Circuit Board. I
> believe it is beyond repair. Does anyone know how to replace it or where I
> can get help repairing it?
>
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13460. Re: [DrakeRadio] L4B repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 05:07:42 UTC
From: Allen Epling
Topic: 13458 Message: 13460

How much? Clone of the circuit board?

Allen Epling

>_____
> From: "elespe@..." <elespe@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Monday, April 29, 2013 12:00 AM
>Subject: Re: [DrakeRadio] L4B repair
>
>
>
>
>
>I can repair it or make a clone
>Paul K0UYA
>> I have a Drake L4B that sustained damage to the Metering Circuit Board. I
>> believe it is beyond repair. Does anyone know how to replace it or where I
>> can get help repairing it?
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13461. Are Any Of You Caorvette Owners?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 06:27:56 UTC
From: Joe - W7RKN
Topic: 13461 Message: 13461

If yes, is it a C6? and if yes again, do you have a ham radio mounted in it.

I am looking for information pertaining to an antenna mounting plate that goes behind the license plate and I have questions about how you ran a ground plane.

Thank you

Joe Wolfe - W7RKN

13462. Re: [DrakeRadio] Issue Tuning a T-4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 07:10:35 UTC
From: Richard Knoppow
Topic: 13456 Message: 13462

```
----- Original Message -----
From: "kf5str" <kf5str@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, April 28, 2013 7:18 PM
Subject: [DrakeRadio] Issue Tuning a T-4xc

> Hello -
>
> I recently acquired a T-4XC / R-4B station and seem to be
> having a problem getting the transmitter tuned. This
> is my first tube set and have no prior experience with
> them. Im having trouble getting past step b from the
> owner's manual
> where I'm trying to dip the plate current. The
> instructions say to advance the gain to 12 o'clock, then
> adjust the
> plate control for a plate current dip. Problem is Im not
> seeing the dip. Is there something missing or that Im
> supposed to
> be doing that is not covered in the manual?
>
> Thanks!
>
I don't know which version of the manual you have but
the one in my files, probably from BAMA, is quite strangely
organized. I first getting an on-line manual for the T4XB
which is a little better organized. The two transmitters are
very similar. Second suggestion is to order Garrey Barrell's
CD on the C line and, since you have a B line receiver maybe
his B line disc too. They are not expensive and are IMO
absolute necessities if you want to get the best out of your
equipment.
You need a decent dummy load, have you one?
The procedure is as follows:
Connect a 50 ohm dummy load that can dissipate the
output of the transmitter.
Set the gain control at minimum and the load control at
minimum (completely counter-clockwise).
Set the Mode contol at SSB.
After a warm up of a few minutes set the bias according
to the instructions. When the sideband selector is in USB
and the gain control at minimum there will be no drive so
the plate current shown on the meter is the bias current.
The correct setting is 70 ma. If you can't get this value
there is a problem and you should shut down the transmitter
```

until you can make some measurements.
To tune start with the gain, plate tune and plate load all completely CCW.
Choose a band. The book suggests 80 meters and that will do. Set the RF tune at about the center of the 80 meter segment. Before doing this check that the slow motion pointer is not mis-aligned by turning the control fully counter-clockwise and looking at the position of the red pointer; it should be at the counter-clockwise end of the calibrated scale, i.e., the bottom of the 160 meter segment. If its not push it there with your finger, its a spring fit on the shaft of the tune adjustment.
Now, set the RF Tune to about the center of the 80 meter segment and set the main tuning control at about the middle of the 80 meter band, say 3700 Khz.
Now, put the function switch on TUNE. Very carefully raise the level of the GAIN control until you see some upward deflection of the plate meter, you want to get a level you can just see. When you have that keep your fingers on the GAIN control and move the RF TUNE control to peak the meter reading. As the plate current comes up keep it at a very low level by turning the gain back down. As quickly as you can set the RF Tune to a peak and then move the Plate Tune control clockwise until you get a dip. If you can't get a dip drop the gain back to zero quickly and shut the transmitter down. If you get a dip then bring the gain up and check the RF Tune to make sure its peaked. Then pull out the Plate Tune knob to switch the meter to RF Out and increase the loading to bring it up, then let the knob go back in and recheck the plate dip. Alternate between output power and plate current until you have the maximum power you can get. Always dip the plate current last. Now move the Gain control up and the power should increase. Now re-tune the Plate Load and Plate Tuning again. If you are loading into a resistive load and the amplifier is properly neutralized you should be able to see a peak in the _output_ at the same time as the plate current dips with tuning. Note that as you approach maximum loading there will be very little dip as you tune through resonance. The power should always peak at the current minimum.
This tuning process is very much simpler and faster than this description suggests. Once you have found the initial dip there will be little change as the loading is increased.
I find it very helpful to have an external power meter on the output. That allows me to see the relative action of the plate tuning and loading without having to switch.
I must reinforce Garrey's warning about running the amplifier out of tune for more than a couple of seconds. The tubes used in the Drake and many other transmitters of

the period have little margin for overload. It doesn't take much to ruin them. When that happens the power output is seriously reduced. If handled with care these tubes will last for many years.
Another suggestion: obtain a small fan to cool the final tubes. It does not have to move much air. I use a small 115V AC fan I got from All Electronics here in Los Angeles, they probably have them on-line. I put a couple of protective screens (Also from All) and used some stick on foam weatherstipping around the edges. The fan just lies on top of the cabinet over the final cage. It should blow out, that is _suck_ the hot air from over the tubes. That way it will also draw cool air over most of the chassis. I put a lamp switch in the line for mine. Simple but keeps the tubes and the whole transmitter cool.
Please let us know what progress you make with this.
The TR-4C and B are excellent little transmitters with specs as good as any current ricebox.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13463. Re: [DrakeRadio] Are Any Of You Caorvette Owners?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 10:35:15 UTC
From: john
Topic: 13461 Message: 13463

Yes, but it's a big block C3 and I don't own a radio loud enough to be heard above the sidepipes

John K5MO

At 02:27 AM 4/29/2013, Joe - W7RKN wrote:
>If yes, is it a C6? and if yes again, do you have a ham radio mounted in
>it.
>
>I am looking for information pertaining to an antenna mounting plate that
>goes behind the license plate and I have questions about how you ran a
>ground plane.
>
>Thank you
>
>Joe Wolfe - W7RKN
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13464. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 16:06:07 UTC
From: slowcountry1
Topic: 13108 Message: 13464

Garey,

Here is an update on the TR-4 progress;

Thanks to a local ham, KC9LAD, he checked rf at the different stages and everything seemed to be amplifying at the suspect tubes. After sitting a parts rig next to my TR-4, we found that a mica cap (don't remember which number it is) was placed on the wrong leg to T-9. After moving it to the correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We went back through all of the alignment and everything was pretty close. Section E, adjustment of Injection Couplers had to be done without the alignment load on 10M. When using the alignment load the S-meter has no deflection and cannot determine proper calibration. Any ideas here?

Section G. Adjustment of Bal Modulator still does not produce and plate current above resting current.

All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?

Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.

Thank you for your time,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
>
> Garey,
>
> One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.
>
> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
>
> RF tune peaks signals on all bands as I expect it should.
>

> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
>
> After repairing T7 and T9, section J alignment all peaks as I understand it should.
>
> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
>
> I have not been able to source an O-Scope yet.
>
> At this point, I'm pretty much stuck in the mud.
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doug -
> >
> > Progress!
> >
> > Have you checked the BAND oscillator? Swap V1. Do you get a strong
> > negative voltage on TP? Does it peak with L1 or L2 as expected? Does
> > RF TUNE peak as it should? If you can't get a meter reading, you
> > should be ableto hear the signal on an external receiver andtune for
> > loudest signal to verify tuning. Do all the adjustments in Section
> > VIII, para J peak as they should? Again if you can't get plate
> > current, tune for max signal in an external receiver.
> >
> > The problem(s) have to be in this area. Did you get access to a
> > scope? Makes these types of problems much easier to track down. You
> > can compare the input and output of various stages to see if you have
> > gain or perhaps loss onone or more bands. And be sure the
> > BANDoscillatoris running strong on the higher bands.
> >
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13465. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 16:32:57 UTC
From: Garey Barrell
Topic: 13108 Message: 13465

Doug -

Whoops! Those pesky connections insist on being made to the correct pin..... :-) This is one of the places where the CD comes in very handy. See my first message at the bottom of thisstring!

I wouldn't worry about the Section G. problem. This methodof setting the BAL MOD was written for the early TR-4 with 4 pole filters (soupcan). The newer sixpole filters have sharper skirts, making the CAR OSC signal too far down to overcome idle current. Later BAL MOD adjustments need to be done with a scope or separate receiver and the adjustments made to minimize the carrier feedthrough. You should be able to null it almost to zero on the scope or well into the noise on a separate receiver.

Have you tried listening to a different harmonic of the CAL? The level can vary quite a bit up there from harmonic to harmonic.

I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at V11? Also, sub V7.

Yes, the audio preamp stage is a big help.

Progress, you're getting there.....

73, Garey - K4OAH
Glen Allen, VA

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resting current.
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> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
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>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
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>>> RF TUNE peak as it should? If you can't get a meter reading, you
>>> should be ableto hear the signal on an external receiver andtune for
>>> loudest signal to verify tuning. Do all the adjustments in Section
>>> VIII, para J peak as they should? Again if you can't get plate
>>> current, tune for max signal in an external receiver.
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>>> The problem(s) have to be in this area. Did you get access to a
>>> scope? Makes these types of problems much easier to track down. You
>>> can compare the input and output of various stages to see if you have
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>>> BANDoscillatoris running strong on the higher bands.
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13466. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 17:10:22 UTC
From: slowcountry1
Topic: 13108 Message: 13466

Garey,

Yes, I have used the CD to attempt to trace everything that I have found modified and screwed up by the previous golden screw driver. I was unable to see this clearly enough on the CD's, its in a tight spot. I make a hand drawing and take pictures before I change anything to ensure that I place parts back where they came from however; this one was already in the wrong place so it went back wrong, oops!

The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.

The rig had a 6BZ6 at V-11 when I started. The rig calls for a 12BZ6 so that's the first thing I replaced. V-7 is a 12BA6 which I've swapped out a couple of times. The stage that I'm at is tolerable however; my idea was to dedicated this rig to 10/15M service, so this is why i'm concerned with sensitivity on 10M. My TR-4CW with the NB will be dedicated to the lower bands and my TR-6 for 6M.

I have tried multiple harmonics of the calibrator signal; have not noticed anything any stronger from one to the other.

Also, as suggested on my tuning complaint earlier in the series of messages, I DeOxit the Plate and loading caps and replaced the ball bearing grease. The plate and load caps are very smooth now and tuning is much smoother however; the plate cap still produces somewhat of a jumpy response in the tuning process. I have checked the grounds on the air variables as well. Is this possibly a coupling capacitor?

I can not believe all of the foul connections and screwy modifications that I have run across on this one. I lost the filament voltage on two of the 6JB6s and the other 6volt tubes the other night. The filament voltage lead off the first PA tube was partially cut and I did not notice it and then it finally broke off. After I get the darn thing working 100%, I'm going to have to go back and re-dress / replace some coax, wire and such that have iron burns and such from previous owners to make it look halfway decent. Its such a great radio its a shame its had such a rough life.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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> Whoops! Those pesky connections insist on being made to the correct
> pin..... :-) This is one of the places where the CD comes in very
> handy. See my first message at the bottom of thisstring!
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> I wouldn't worry about the Section G. problem. This methodof setting
> the BAL MOD was written for the early TR-4 with 4 pole filters
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> > Yahoo! Groups Links
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13467. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 17:36:26 UTC
From: Garey Barrell
Topic: 13108 Message: 13467

OK, I recall this one now. I typically have four or five of these 'projects' going at a time, and sometimes they run together! :-)

Did you verify that you have 12V on the 12BZ6??

Your erratic tuning sounds like neutralization. This wouldn't affect sensitivity on 10M though. Any time you have a stage or stages that are 'jittery' or jump around when tune, it's a good bet that you have a stability problem.

It 'could' indicate a fixed capacitor breaking down, or a bad solder joint. Mica caps with large DC voltagesappliedto them can sometimes develop 'whiskers' that can short intermittently. And of course, bad grounds, or poor lead dress can cause instability as well.

73, Garey - K4OAH
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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.
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>> the BAL MOD was written for the early TR-4 with 4 pole filters
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>> CAR OSC signal too far down to overcome idle current. Later BAL MOD
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>> Have you tried listening to a different harmonic of the CAL? The level
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>>>>>>> today. Once you find a suitable value, I'd move it inside the can
>>>>>>> just to be safe. Be sure and use stable capacitors such as silver
>>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
>>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
>>>>>>> cap it would give you a starting point.
>>>>>>>
>>>>>>> It's certainly possible that a model had a different layout, although
>>>>>>> I've not seen any significant variations. If you look in the
>>>>>>> 'Versions' directory, there are a couple of Drake photos of different
>>>>>>> models that may help determine if something is abnormal.
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>>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
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>>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
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13468. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 18:15:40 UTC
From: slowcountry1
Topic: 13108 Message: 13468

Garey,

Yes I verified the voltage early on, the 6BZ6 that was in there was very black from over voltage. I also verified that the leads were dressed properly and went to the correct locations. That's not to say that I didn't miss something though. I purchased a dozen 12BZ6 tubes and have tried several of them to make sure that I did not have a soft tube. They all act the same.

I neautralized the PA and it is very close on all bands. It was quite difficult to do this time, compared to my other drakes though.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> OK, I recall this one now. I typically have four or five of these
> 'projects' going at a time, and sometimes they run together! :-)
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> Did you verify that you have 12V on the 12BZ6??
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> Your erratic tuning sounds like neutralization. This wouldn't affect
> sensitivity on 10M though. Any time you have a stage or stages that
> are 'jittery' or jump around when tune, it's a good bet that you have
> a stability problem.
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> It 'could' indicate a fixed capacitor breaking down, or a bad solder
> joint. Mica caps with large DC voltagesappliedto them can sometimes
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> >>>>>>> just to be safe. Be sure and use stable capacitors such as silver
> >>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> >>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
> >>>>>>> cap it would give you a starting point.

> >>>>>>>
> >>>>>>> It's certainly possible that a model had a different layout, although
> >>>>>>> I've not seen any significant variations. If you look in the
> >>>>>>> 'Versions' directory, there are a couple of Drake photos of different
> >>>>>>> models that may help determine if something is abnormal.
> >>>>>>>
> >>>>>>> 73, Garey - K4OAH
> >>>>>>> Glen Allen, VA
> >>>>>>>
> >>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>> <www.k4oah.com>
> >>>>>>>
> >>>>>>> slowcountry1 wrote:
> >>>>>>>> Garey,
> >>>>>>>>
> >>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
> >>>>>>>>
> >>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> >>>>>>>>
> >>>>>>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
> >>>>>>>>
> >>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> >>>>>>>>
> >>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> >>>>>>>>
> >>>>>>>> Regards,
> >>>>>>>>
> >>>>>>>> Doug N9XTF
> >>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>> Doug -
> >>>>>>>>>
> >>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
> >>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
> >>>>>>>>> critical. This is the best way to make sure everything is back where
> >>>>>>>>> it should be!
> >>>>>>>>>
> >>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>> Glen Allen, VA

> >>>>>>>>>
> >>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>> <www.k4oah.com>
> >>>>>>>>>
> >>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>> Garey,
> >>>>>>>>>>
> >>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
> >>>>>>>>>>
>

13469. Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 18:55:12 UTC
From: Paul Kraemer
Topic: 13432 Message: 13469

Need your address Steve
Paul
----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, April 27, 2013 9:01 PM
Subject: Re: [DrakeRadio] Belden 8421 cable 250 feet on Ebay

> Works for me. No rush.
>
> Steve Wedge, W1ES/4
>
> Sent from my iPad: please don't laugh too hard at any autocorrect grammar
> changes :)
>
> On Apr 27, 2013, at 9:51 PM, elespe@... wrote:
>
>> Thanks Steve
>> I'll get back to you Monday
>> Paul
>> > Paul, I'll take 21 ft. Let me know how to pay...
>> >
>> > Steve Wedge, W1ES/4
>> >
>> > Sent from my iPad: please don't laugh too hard at any autocorrect
>> > grammar
>> > changes :)
>> >
>> > On Apr 27, 2013, at 7:45 PM, elespe@... wrote:
>> >
>> >> I did and so far have 190 ft left
>> >> I did not get it that cheap but considering the investment I think my
>> >> selling price for 50 cents a foot plus postage is pretty generous, put
>> >> in
>> >> box, take to post office.
>> >> ny takers?
>> >> Buy a AC-4 rebuild kit and I'll include 6 ft for FREE. Today only
>> >> Paul K0UYA
>> >>
>> >> > It's needed only for the INJ cable through the B Line. 3' long! You
>> >> > need two of these for the INJ and the CAR OSC for the C-Line, total
>> >> > of
>> >> > six feet....
>> >> >
>> >> > It would be great if ONE person could buy the 250' and we'd never

>> >> > need
>> >> > any more for the list! :-)
>> >> >
>> >> > 73, Garey - K4OAH
>> >> > Glen Allen, VA
>> >> >
>> >> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> >> > and TR-4/C Service Supplement CDs
>> >> > <www.k4oah.com>
>> >> >
>> >> > William Houghton wrote:
>> >> >> Is this the cable used to connect T-4X's to R-4's?
>> >> >>
>> >> >>
>> >> >>
>> >> >>
>> >> >> _____
>> >> >> From: de_n7ioh <wendy101@...>
>> >> >> To: DrakeRadio@yahoogroups.com
>> >> >> Sent: Sat, April 27, 2013 7:20:24 AM
>> >> >> Subject: [DrakeRadio] Belden 8421 cable 250 feet on Ebay
>> >> >>
>> >> >>
>> >> >> There is just listed on Ebay two new 250 foot reels of Belden 8421
>> >> cable
>> >> >> with a
>> >> >> buy it now price of $69.97 plus shipping. The item ships from
>> >> >> Pennsylvania and
>> >> >> to me in Arizona the shipping is listed as $15.67 so it should be
>> >> less
>> >> >> if you
>> >> >> are closer. For me that comes out to $0.344 a foot a very good
>> >> >> price.
>> >> >>
>> >> >>
>> >> >> Al, n7ioh
>> >> >> Payson, Arizona, USA
>> >> >>
>> >> >>
>> >> >>
>> >> >>
>> >> >> [Non-text portions of this message have been removed]
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>> >> >> Yahoo! Groups Links
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> Yahoo! Groups Links
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13470. WTB: Drake 2BQ or 2AQ

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 19:05:59 UTC
From: Van Lincoln WD8AAM
Topic: 13470 Message: 13470

WANT TO BUY
WTB: Drake 2BQ or 2AQ, not working OK as long as all the pieces are there.
My 2B is lonely and I want to make her happy, and me also....LOL
Let me know if you have one to sell, thank you Van, wd8aam Minnesota

13471. TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 17:59:01 UTC
From: bob_af6c
Topic: 13471 Message: 13471

Last August I was asked to sell some equipment for an elderly ham. Included in the list of equipment is a Drake TR-7 Station. Most of the equipment sold, but there were no serious offers on the TR-7. According to the owner, the radio was working when removed from service around 10 years ago, with the exception of an intermittent in the mic connector.

Earlier this month I decided I wanted to get the radio out of the garage and figured I needed to get it working. The mic connector was reinstalled, the radio fired up (after conditioning the capacitors in the PS-7) and put on the air on our club 10 meter net. Good reports were received and the radio seems to be working well. Power output into a dummy load is 140W (less on 15 and 10M).

Physically, with the exception of the microphone, the equipment is very good with no major scratches or dents. The photo on the website makes the plastic over the display look scratched, but that is more the result of the head-on flash than the actual plastic.

You can get the details of the radio at:

http://www.w6ze.org/FOR-SALE/W5KGM_Sale.html

Basically it includes the TR-7 (with DR7, NB7, FA7, 300 and 1800 Hz optional filters) PS-7, RV-7, Drake microphone, original manuals and the Service/Schematic manual).

I'd like to sell it locally (Northern Orange County, CA) I currently have a price of $699 for the station, but wonder if that is excessive or perhaps too low? That price point was suggested by someone else.

Bob - AF6C

13472. Re: [DrakeRadio] TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-29 21:19:12 UTC
From: Jim Shorney
Topic: 13471 Message: 13472

To set a fair price for the radio, you really need to know which options are intsalled:
Noise blanker
Optional filters
AUX-7
Fan

Here are a couple of references:

http://www.joetracker.com/prices/drake.htm

http://www.aade.com/hampedia/drakep.htm

Prices vary according to condition of the radio, options installed, accessories included, serial number (and if it is a real "A" model or not), and current demand.

73

-Jim
NU0C

On Mon, 29 Apr 2013 17:59:01 -0000, bob_af6c wrote:

>Last August I was asked to sell some equipment for an elderly ham. Included in the list of equipment is a Drake TR-7 Station. Most of the equipment sold, but there were no serious offers on the TR-7. According to the owner, the radio was working when removed from service around 10 years ago, with the exception of an intermittent in the mic connector.
>
>Earlier this month I decided I wanted to get the radio out of the garage and figured I needed to get it working. The mic connector was reinstalled, the radio fired up (after conditioning the capacitors in the PS-7) and put on the air on our club 10 meter net. Good reports were received and the radio seems to be working well. Power output into a dummy load is 140W (less on 15 and 10M).
>
>Physically, with the exception of the microphone, the equipment is very good with no major scratches or dents. The photo on the website makes the plastic over the display look scratched, but that is more the result of the head-on flash than the actual plastic.
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>You can get the details of the radio at:
>
>http://www.w6ze.org/FOR-SALE/W5KGM_Sale.html
>
>Basically it includes the TR-7 (with DR7, NB7, FA7, 300 and 1800 Hz optional filters) PS-7, RV-7, Drake microphone, original manuals and the Service/Schematic manual).
>
>I'd like to sell it locally (Northern Orange County, CA) I currently have a price of $699

for the station, but wonder if that is excessive or perhaps too low? That price point was suggested by someone else.
>
>Bob - AF6C
>
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13473. T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 01:16:41 UTC
From: k5fex
Topic: 13473 Message: 13473

T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the radio, just curious!

Wayne
K5FEX

13474. Re: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 01:43:48 UTC
From: Garey Barrell
Topic: 13473 Message: 13474

Wayne -

That refers to the color coded CAR OSC crystal. This started in the
late A models and carried through the B. There is an article on
WB4HFN describing what this was for.

<http://www.wb4hfn.com/DRAKE/DrakeArticles/CrystalCodes.htm>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k5fex wrote:
> T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the
radio, just curious!
>
> Wayne
> K5FEX
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

13475. Re: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 01:50:37 UTC
From: Steve Wedge
Topic: 13473 Message: 13475

The letter suffixes denoted the characteristics of the carrier oscillator crystal. Back before the C-Line, when the rigs were synched by this oscillator, they tried to match the characteristics of this crystal as closely as possible. Thus, if you wanted to keep your Twins more able to transceive, you matched the letter codes so that you had similar drift characteristics.

I've seen "B", "G" and "R" units, and the CO crystals were dabbed in Blue, Green or Red paint, accordingly.

Garey may have the actual specs for the markings...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: k5fex
Sent: Monday, April 29, 2013 9:16 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] T-4XB on eBay

T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the radio, just curious!

Wayne
K5FEX

[Non-text portions of this message have been removed]

13476. Re: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 03:00:11 UTC
From: AA8W
Topic: 13473 Message: 13476

I have an R-4B with a B and a T-4XB with an R crystal.
Anybody want to swap?

73,
Mike AA8W

Wayne -

That refers to the color coded CAR OSC crystal. This started in the
late A models and carried through the B. There is an article on
WB4HFN describing what this was for.

<http://www.wb4hfn.com/DRAKE/DrakeArticles/CrystalCodes.htm>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k5fex wrote:
> T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the
radio, just curious!
>
> Wayne
> K5FEX
>

[Non-text portions of this message have been removed]

13477. Re: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 04:01:21 UTC
From: vacuuminded2@...
Topic: 13473 Message: 13477

I have one R-4B with B, one R-4B with G, and 3 T-4XB all with G. As crystals age and drift as characteristics change, I doubt staying true to "matched" pairs in the RX and TX is really viable some 40+ years later. Any input?

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Apr 29, 2013, at 10:00 PM, "AA8W" <aa8w@...> wrote:

> I have an R-4B with a B and a T-4XB with an R crystal.
> Anybody want to swap?
>
> 73,
> Mike AA8W
>
> Wayne -
>
> That refers to the color coded CAR OSC crystal. This started in the
> late A models and carried through the B. There is an article on
> WB4HFN describing what this was for.
>
> <http://www.wb4hfn.com/DRAKE/DrakeArticles/CrystalCodes.htm>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> k5fex wrote:
> > T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the radio, just curious!
> >
> > Wayne
> > K5FEX
> >
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

13478. Size of TR4 & RV4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 10:09:41 UTC
From: zl1bbw
Topic: 13478 Message: 13478

I am going to collect my TR4 RV4 AC4 in a couple of weeks.

What size are the cabinets? please.

Then I can make up the packing to fit.

A 2 hour drive and then a 5 hour coach trip to meet the seller, then guess what after an hour or so in new Plymouth and other 5 hour coach trip back to Auckland and a 2 hour drive home, I must be truly nuts :-)

Thanks

13479. RE: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 11:08:57 UTC
From: wayne.smith
Topic: 13473 Message: 13479

Thanks all. Guess i should have done my homework by going the WB4HFN's site. Wealth of info there!

73

Wayne

From: DrakeRadio@...m [mailto:DrakeRadio@yahoogroups.com] On Behalf Of vacuuminded2@...
Sent: Monday, April 29, 2013 11:01 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XB on eBay

I have one R-4B with B, one R-4B with G, and 3 T-4XB all with G. As crystals age and drift as characteristics change, I doubt staying true to "matched" pairs in the RX and TX is really viable some 40+ years later. Any input?

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On Apr 29, 2013, at 10:00 PM, "AA8W" <aa8w@live.com <mailto:aa8w%40live.com> > wrote:

> I have an R-4B with a B and a T-4XB with an R crystal.
> Anybody want to swap?
>
> 73,
> Mike AA8W
>
> Wayne -
>
> That refers to the color coded CAR OSC crystal. This started in the
> late A models and carried through the B. There is an article on
> WB4HFN describing what this was for.
>
> <http://www.wb4hfn.com/DRAKE/DrakeArticles/CrystalCodes.htm>
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> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> k5fex wrote:
> > T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want the radio, just curious!

> >
> > Wayne
> > K5FEX
> >
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13480. Re: [DrakeRadio] Size of TR4 & RV4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 13:17:55 UTC
From: Mark Pilant
Topic: 13478 Message: 13480

The ones I have measure:

Depth Width Height
RV-4 12-1/4" (31.1 cm) 10-3/4" (27.3 cm) 6-1/8" (15.6 cm)
TR-4 15-1/8" (38.4 cm) 10-3/4" (27.3 cm) 6-1/8" (15.6 cm)

These measurements include the standard feet at each corner for the height and the tuning knobs for the depth.

I hope this helps.

73

- Mark N1VQW

13481. Re: [DrakeRadio] Size of TR4 & RV4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 13:48:35 UTC
From: Don Cunningham
Topic: 13478 Message: 13481

Remember that we always remove the AC4 from the MS4 or RV4 cabinets for shipping. I doubt that your trip is as much an ordeal as shipping, but I think I might remove the AC4 just in case. After a couple of experiences the other way, the damage is significant!! Enjoy your "new to you" Drakes!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6283 - Release Date: 04/29/13

[Non-text portions of this message have been removed]

13482. Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 13:57:30 UTC
From: Steve Wedge
Topic: 13482 Message: 13482

Yes, I know there have been discussions, but I can't find info pertinent to Westinghouse 6JB6's. Will they dimensionally fit into the RF cage in a T-4whatever or TR-4whatever?

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13483. Re: [DrakeRadio] T-4XB on eBay

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 15:02:15 UTC
From: Garey Barrell
Topic: 13473 Message: 13483

Chris -

The crystalswere selected and marked for their 'DRIFT with
temperature' characteristics. These are determined by the precise
angle of the crystal cut, and to my knowledge don't change with aging.

Some crystals drift up with temp, some drift down, and some are
relatively flat, again depending upon the angle of cut. It's been 40
years, but my best recollection is that Red drifted up, Green was
pretty flat, and Blue drifted down. I have seen a very few 'Y'ellow,
but never any description. Perhaps they had an 'S' curve!! :-)

'Matched' color units hold TRANSCEIVE align very well in most cases.
Obviously fans and climate controlled rooms help. Of course, all of
this is ONLY of importance if you like to transceive on SSB. Generally
speaking, anything over ~30 Hz difference becomes noticeable on SSB.

By the way, the C-Line resolved the problem by sending a sample of the
CAR OSC signal over tothe receiver for use as the 3rd IF LO, locking
the two together.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

vacuuminded2@... wrote:
> I have one R-4B with B, one R-4B with G, and 3 T-4XB all with G. As crystals age and drift as characteristics change, I doubt staying true to "matched" pairs in the RX and TX is really viable some 40+ years later. Any input?
>
> Regards,
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On Apr 29, 2013, at 10:00 PM, "AA8W" <aa8w@...> wrote:
>
>> I have an R-4B with a B and a T-4XB with an R crystal.
>> Anybody want to swap?
>>
>> 73,
>> Mike AA8W
>>
>> Wayne -

>>
>> That refers to the color coded CAR OSC crystal. This started in the
>> late A models and carried through the B. There is an article on
>> WB4HFN describing what this was for.
>>
>> <http://www.wb4hfn.com/DRAKE/DrakeArticles/CrystalCodes.htm>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> k5fex wrote:
>>> T-4XB listed has four digit SN ending in"R". Anyone know what the R means? Don't want
the radio, just curious!
>>>
>>> Wayne
>>> K5FEX
>>>

13484. T4XC on AM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 15:40:08 UTC
From: Abqcooks@...
Topic: 13473 Message: 13484

Greetings to the group,

Just wondering what anyone may know about operating the T4XC on AM.
Mine works FB on CW and SSB and thought I would give it a try on AM. The manual
says the carrier is held at "a few watts" with no modulation and that with modulation the plate
current should kick to .15
Upon trying mine I find that with PTT and no modulation I am getting about .20 plate amps and 25w output.
That's probably more than the "few watts" that the manual speaks of. So I thought I had better pause and
ask what others have experienced when operating AM. Any hints or cautions much appreciated.
Not sure the finals would really appreciate AM anyway but figure I should proceed with some caution
and some advice. 73 and thanks Jim

[Non-text portions of this message have been removed]

13485. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 15:55:30 UTC
From: Garey Barrell
Topic: 13482 Message: 13485

Steve -

I've had mixed results with Westinghouse. I assume they do NOT
manufacture 6JB6s, just remark them. I've had a couple that _would
not_ neutralize, although they 'looked' identical inside, even with
changes in the neutralization cap(s). I had another pair someone
brought with a unit to repair, allegedly new in box, looked new, but
very low output (50W). Don't recall any dimensional problems, but you
never know since they could have been BUILT by anyone.......

I avoid 'em.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yes, I know there have been discussions, but I can't find info pertinent to Westinghouse
6JB6's. Will they dimensionally fit into the RF cage in a T-4whatever or TR-4whatever?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
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> ------------------------------------
>
> Yahoo! Groups Links
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>

13486. Re: [DrakeRadio] T4XC on AM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 16:02:17 UTC
From: Garey Barrell
Topic: 13473 Message: 13486

Jim -

That's kinda high. 10 - 15 watts is more typical. A weak V7 or R63
or 15k resistors changed value?

The 'kick to 0.15A' is a wild guess since the limitation is peak
power. The 0.15A is what we thinkthe meter shows when it's really
peaking at 350 mA or so. You really shouldn't run AM like this unless
you have a scope on the output. THERE IS NO ALC ON AM!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Abqcooks@... wrote:
> Greetings to the group,
>
> Just wondering what anyone may know about operating the T4XC on AM.
> Mine works FB on CW and SSB and thought I would give it a try on AM. The manual
> says the carrier is held at "a few watts" with no modulation and that with modulation the
plate
> current should kick to .15
> Upon trying mine I find that with PTT and no modulation I am getting about .20 plate amps
and 25w output.
> That's probably more than the "few watts" that the manual speaks of. So I thought I had
better pause and
> ask what others have experienced when operating AM. Any hints or cautions much
appreciated.
> Not sure the finals would really appreciate AM anyway but figure I should proceed with
some caution
> and some advice. 73 and thanks Jim
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------

>
> Yahoo! Groups Links
>
>
>
>

13487. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 20:57:29 UTC
From: Steve Wedge
Topic: 13482 Message: 13487

Drat. I guess that's why they're cheaper.

Thanks for the tip, Garey. I think I'll take the medicine and get Syls or GE's.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, April 30, 2013 11:55 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Westinghouse 6JB6's

Steve -

I've had mixed results with Westinghouse. I assume they do NOT
manufacture 6JB6s, just remark them. I've had a couple that _would
not_ neutralize, although they 'looked' identical inside, even with
changes in the neutralization cap(s). I had another pair someone
brought with a unit to repair, allegedly new in box, looked new, but
very low output (50W). Don't recall any dimensional problems, but you
never know since they could have been BUILT by anyone.......

I avoid 'em.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yes, I know there have been discussions, but I can't find info pertinent to Westinghouse
6JB6's. Will they dimensionally fit into the RF cage in a T-4whatever or TR-4whatever?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>

> [Non-text portions of this message have been removed]
>
>
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> ------------------------------------
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> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

13488. TR-4 R187 trimmer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 22:38:52 UTC
From: slowcountry1
Topic: 13488 Message: 13488

I have lost the 1K R187 trimmer in my project radio. The manual doesn't say what wattage it needs to be rated for. What can I get away with here?

Thanks,

Doug N9XTF

13489. Re: TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-30 22:48:12 UTC
From: bob_af6c
Topic: 13471 Message: 13489

Thanks for the links Jim! Those should help.

As for the included equipment, it was all spelled out on the web link I provided including serial #S. The TR7 has the DR-7 display board, the NB-7 (later model as I recall) The FS-7 fan, The optional 300 and 1800 Hz filters. Supporting equipment include a Drake mic, PS-7 power supply with a Boxer fan (identical mounting), an RV-7 VFO all manuals in excellent condition and Service Manual.

I recently discovered this TR-7 has been modified for continuous transmit. The owner was a MARS affiliate.

The second link you offered brings up a question. Why is a TR-7 worth more than a TR-7/PS-7 combination?:Typo?

TR-7 12 $400.00 $661.35 $1,250.00
TR-7/PS-7 12 $250.00 $546.42 $800.00

Always nice to meet another 'C' call!

Bob

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
>
> To set a fair price for the radio, you really need to know which options are
> intsalled:
> Noise blanker
> Optional filters
> AUX-7
> Fan
>
> Here are a couple of references:
>
> http://www.joetracker.com/prices/drake.htm
>
> http://www.aade.com/hampedia/drakep.htm
>
> Prices vary according to condition of the radio, options installed, accessories
> included, serial number (and if it is a real "A" model or not), and current
> demand.
>
> 73
>
> -Jim
> NU0C
>
>

> On Mon, 29 Apr 2013 17:59:01 -0000, bob_af6c wrote:
>
> >Last August I was asked to sell some equipment for an elderly ham. Included in the list of equipment is a Drake TR-7 Station. Most of the equipment sold, but there were no serious offers on the TR-7. According to the owner, the radio was working when removed from service around 10 years ago, with the exception of an intermittent in the mic connector.
> >
> >Earlier this month I decided I wanted to get the radio out of the garage and figured I needed to get it working. The mic connector was reinstalled, the radio fired up (after conditioning the capacitors in the PS-7) and put on the air on our club 10 meter net. Good reports were received and the radio seems to be working well. Power output into a dummy load is 140W (less on 15 and 10M).
> >
> >Physically, with the exception of the microphone, the equipment is very good with no major scratches or dents. The photo on the website makes the plastic over the display look scratched, but that is more the result of the head-on flash than the actual plastic.
> >
> >You can get the details of the radio at:
> >
> >http://www.w6ze.org/FOR-SALE/W5KGM_Sale.html
> >
> >Basically it includes the TR-7 (with DR7, NB7, FA7, 300 and 1800 Hz optional filters) PS-7, RV-7, Drake microphone, original manuals and the Service/Schematic manual).
> >
> >I'd like to sell it locally (Northern Orange County, CA) I currently have a price of $699 for the station, but wonder if that is excessive or perhaps too low? That price point was suggested by someone else.
> >
> >Bob - AF6C
> >
> >
> >
>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>

13490. Re: [DrakeRadio] Re: TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 00:17:25 UTC
From: Jim Shorney
Topic: 13471 Message: 13490

On Tue, 30 Apr 2013 22:48:12 -0000, bob_af6c wrote:

>The second link you offered brings up a question. Why is a TR-7 worth more than a TR-7/PS-7 combination?:Typo?
>
>TR-7 12 $400.00 $661.35 $1,250.00
>TR-7/PS-7 12 $250.00 $546.42 $800.00

My guess would be auction site frenzy over an unusually pristine, possibly "new-in-box", specimen. ISTR a couple of years ago that a guitar player of some note who is a ham spent a lot of money on such a unit.

>Always nice to meet another 'C' call!

Indeed.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13491. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 01:04:44 UTC
From: slowcountry1
Topic: 13108 Message: 13491

Garey,

While troubleshooting the low 10M sensitivity last evening I lost R53, R187 trimmer, R168 and R71. I thought I had it traced down, replaced the burnt resistors and inserted a newer trimmer as a test. Upon power up, I instantly burnt all of the afore mentioned resistors for the exception of the trimmer.

Do you offer repair services on the TR4 line or recommend someone to completely go through this thing. I have wasted way too much time and continue to come up short. Its time a professional take care of it for me.

Thanks for your time,

N9XTF

--- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>
> Garey,
>
> Yes I verified the voltage early on, the 6BZ6 that was in there was very black from over voltage. I also verified that the leads were dressed properly and went to the correct locations. That's not to say that I didn't miss something though. I purchased a dozen 12BZ6 tubes and have tried several of them to make sure that I did not have a soft tube. They all act the same.
>
> I neautralized the PA and it is very close on all bands. It was quite difficult to do this time, compared to my other drakes though.
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > OK, I recall this one now. I typically have four or five of these
> > 'projects' going at a time, and sometimes they run together! :-)
> >
> > Did you verify that you have 12V on the 12BZ6??
> >
> > Your erratic tuning sounds like neutralization. This wouldn't affect
> > sensitivity on 10M though. Any time you have a stage or stages that
> > are 'jittery' or jump around when tune, it's a good bet that you have
> > a stability problem.
> >
> > It 'could' indicate a fixed capacitor breaking down, or a bad solder
> > joint. Mica caps with large DC voltagesappliedto them can sometimes
> > develop 'whiskers' that can short intermittently. And of course, bad
> > grounds, or poor lead dress can cause instability as well.
> >
> > 73, Garey - K4OAH

> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > slowcountry1 wrote:
> > >
> > > Garey,
> > >
> > > Yes, I have used the CD to attempt to trace everything that I have found modified and screwed up by the previous golden screw driver. I was unable to see this clearly enough on the CD's, its in a tight spot. I make a hand drawing and take pictures before I change anything to ensure that I place parts back where they came from however; this one was already in the wrong place so it went back wrong, oops!
> > >
> > > The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.
> > >
> > > The rig had a 6BZ6 at V-11 when I started. The rig calls for a 12BZ6 so that's the first thing I replaced. V-7 is a 12BA6 which I've swapped out a couple of times. The stage that I'm at is tolerable however; my idea was to dedicated this rig to 10/15M service, so this is why i'm concerned with sensitivity on 10M. My TR-4CW with the NB will be dedicated to the lower bands and my TR-6 for 6M.
> > >
> > > I have tried multiple harmonics of the calibrator signal; have not noticed anything any stronger from one to the other.
> > >
> > > Also, as suggested on my tuning complaint earlier in the series of messages, I DeOxit the Plate and loading caps and replaced the ball bearing grease. The plate and load caps are very smooth now and tuning is much smoother however; the plate cap still produces somewhat of a jumpy response in the tuning process. I have checked the grounds on the air variables as well. Is this possibly a coupling capacitor?
> > >
> > > I can not believe all of the foul connections and screwy modifications that I have run across on this one. I lost the filament voltage on two of the 6JB6s and the other 6volt tubes the other night. The filament voltage lead off the first PA tube was partially cut and I did not notice it and then it finally broke off. After I get the darn thing working 100%, I'm going to have to go back and re-dress / replace some coax, wire and such that have iron burns and such from previous owners to make it look halfway decent. Its such a great radio its a shame its had such a rough life.
> > >
> > > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Doug -
> > >>
> > >> Whoops! Those pesky connections insist on being made to the correct
> > >> pin..... :-) This is one of the places where the CD comes in very
> > >> handy. See my first message at the bottom of thisstring!
> > >>
> > >> I wouldn't worry about the Section G. problem. This methodof setting

> > >> the BAL MOD was written for the early TR-4 with 4 pole filters
> > >> (soupcan). The newer sixpole filters have sharper skirts, making the
> > >> CAR OSC signal too far down to overcome idle current. Later BAL MOD
> > >> adjustments need to be done with a scope or separate receiver and the
> > >> adjustments made to minimize the carrier feedthrough. You should be
> > >> able to null it almost to zero on the scope or well into the noise on
> > >> a separate receiver.
> > >>
> > >> Have you tried listening to a different harmonic of the CAL? The level
> > >> can vary quite a bit up there from harmonic to harmonic.
> > >>
> > >> I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at
> > >> V11? Also, sub V7.
> > >>
> > >> Yes, the audio preamp stage is a big help.
> > >>
> > >> Progress, you're getting there.....
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> slowcountry1 wrote:
> > >>> Garey,
> > >>>
> > >>> Here is an update on the TR-4 progress;
> > >>>
> > >>> Thanks to a local ham, KC9LAD, he checked rf at the different stages and everything seemed to be amplifying at the suspect tubes. After sitting a parts rig next to my TR-4, we found that a mica cap (don't remember which number it is) was placed on the wrong leg to T-9. After moving it to the correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We went back through all of the alignment and everything was pretty close. Section E, adjustment of Injection Couplers had to be done without the alignment load on 10M. When using the alignment load the S-meter has no deflection and cannot determine proper calibration. Any ideas here?
> > >>>
> > >>> Section G. Adjustment of Bal Modulator still does not produce and plate current above resting current.
> > >>>
> > >>> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
> > >>>
> > >>> Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.

> > >>>
> > >>> Thank you for your time,
> > >>>
> > >>> Doug N9XTF
> > >>>
> > >>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> > >>>> Garey,
> > >>>>
> > >>>> One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.
> > >>>>
> > >>>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
> > >>>>
> > >>>> RF tune peaks signals on all bands as I expect it should.
> > >>>>
> > >>>> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
> > >>>>
> > >>>> After repairing T7 and T9, section J alignment all peaks as I understand it should.
> > >>>>
> > >>>> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
> > >>>>
> > >>>> I have not been able to source an O-Scope yet.
> > >>>>
> > >>>> At this point, I'm pretty much stuck in the mud.
> > >>>>
> > >>>> Doug N9XTF
> > >>>>
> > >>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >>>>> Doug -
> > >>>>>
> > >>>>> Progress!
> > >>>>>
> > >>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
> > >>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
> > >>>>> RF TUNE peak as it should? If you can't get a meter reading, you
> > >>>>> should be ableto hear the signal on an external receiver andtune for
> > >>>>> loudest signal to verify tuning. Do all the adjustments in Section

> > >>>>> VIII, para J peak as they should? Again if you can't get plate
> > >>>>> current, tune for max signal in an external receiver.
> > >>>>>
> > >>>>> The problem(s) have to be in this area. Did you get access to a
> > >>>>> scope? Makes these types of problems much easier to track down. You
> > >>>>> can compare the input and output of various stages to see if you have
> > >>>>> gain or perhaps loss onone or more bands. And be sure the
> > >>>>> BANDoscillatoris running strong on the higher bands.
> > >>>>>
> > >>>>> 73, Garey - K4OAH
> > >>>>> Glen Allen, VA
> > >>>>>
> > >>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >>>>> and TR-4/C Service Supplement CDs
> > >>>>> <www.k4oah.com>
> > >>>>>
> > >>>>> slowcountry1 wrote:
> > >>>>>> Garey,
> > >>>>>>
> > >>>>>> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
> > >>>>>>
> > >>>>>> I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
> > >>>>>>
> > >>>>>> With the selector switch in Cal, the S-Meter produces readings on the following bands;
> > >>>>>>
> > >>>>>> 80M S9+30
> > >>>>>> 40M S9+10
> > >>>>>> 20M S7
> > >>>>>> 15M S1
> > >>>>>> 10M no S reading change.
> > >>>>>>
> > >>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
> > >>>>>>
> > >>>>>> I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
> > >>>>>>
> > >>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
> > >>>>>>
> > >>>>>> Thanks for all of your help,
> > >>>>>>

> > >>>>>> Doug N9XTF
> > >>>>>>
> > >>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >>>>>>> Doug -
> > >>>>>>>
> > >>>>>>> It is not unusual for there to be caps and resistors inside
> > >>>>>>> transformers. I suppose if it's not marked it may be a bypass or no
> > >>>>>>> telling. I suspect what has happened is that someone tried to move it
> > >>>>>>> to CB and failed, and then either that person or someone else has
> > >>>>>>> tried to return it to stock.
> > >>>>>>>
> > >>>>>>> You can certainly mount the cap on the terminals on the outside of the
> > >>>>>>> transformer. There may be some coupling problems, but I doubt it.
> > >>>>>>> Certainly worth trying until you find the right one. Sometimes these
> > >>>>>>> caps are selected to account for variations in coil windings, plus
> > >>>>>>> ferrites were not nearly as consistent from batch to batch as they are
> > >>>>>>> today. Once you find a suitable value, I'd move it inside the can
> > >>>>>>> just to be safe. Be sure and use stable capacitors such as silver
> > >>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> > >>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
> > >>>>>>> cap it would give you a starting point.
> > >>>>>>>
> > >>>>>>> It's certainly possible that a model had a different layout, although
> > >>>>>>> I've not seen any significant variations. If you look in the
> > >>>>>>> 'Versions' directory, there are a couple of Drake photos of different
> > >>>>>>> models that may help determine if something is abnormal.
> > >>>>>>>
> > >>>>>>> 73, Garey - K4OAH
> > >>>>>>> Glen Allen, VA
> > >>>>>>>
> > >>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >>>>>>> and TR-4/C Service Supplement CDs
> > >>>>>>> <www.k4oah.com>
> > >>>>>>>
> > >>>>>>> slowcountry1 wrote:
> > >>>>>>>> Garey,
> > >>>>>>>>
> > >>>>>>>> I've noticed that there are several things different between the picture on
the CD and the rig. Were there some differences between the rig serial numbers that would
explain that? I know there are some slight differences in the schematics.
> > >>>>>>>>
> > >>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it
is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it
is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing
and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> > >>>>>>>>
> > >>>>>>>> I was thinking of installing it external to the can to facilitate trying
different values. I imagine that this will effect tuning if I do so, what are your thoughts
here?
> > >>>>>>>>

> > >>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> > >>>>>>>>
> > >>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> > >>>>>>>>
> > >>>>>>>> Regards,
> > >>>>>>>>
> > >>>>>>>> Doug N9XTF
> > >>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >>>>>>>>> Doug -
> > >>>>>>>>>
> > >>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
> > >>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
> > >>>>>>>>> critical. This is the best way to make sure everything is back where
> > >>>>>>>>> it should be!
> > >>>>>>>>>
> > >>>>>>>>> 73, Garey - K4OAH
> > >>>>>>>>> Glen Allen, VA
> > >>>>>>>>>
> > >>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >>>>>>>>> and TR-4/C Service Supplement CDs
> > >>>>>>>>> <www.k4oah.com>
> > >>>>>>>>>
> > >>>>>>>>> slowcountry1 wrote:
> > >>>>>>>>>> Garey,
> > >>>>>>>>>>
> > >>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
> > >>>>>>>>>>
> >
>

13492. Re: [DrakeRadio] Re: TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 02:36:18 UTC
From: Garey Barrell
Topic: 13471 Message: 13492

Bob -

You've run into one of the problems with that type of list.... It only reports on a 'sale', without regard for what is included, or not. The TR-7 'may' have had three filters and a Noise Blanker in it, or a fan, or ...

Best pricing I have found is to look at the completed sales on eBay and eHam and evaluate what each one was and it's condition. You see a pattern after awhile! Then knock about 20% off of the average eBay price and you'll be close for a direct sale.

If you absolutely want to get the most for it, take outall the accessories and put it all in separate auctions.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

bob_af6c wrote:
> Thanks for the links Jim! Those should help.
>
> As for the included equipment, it was all spelled out on the web link I provided including serial #S. The TR7 has the DR-7 display board, the NB-7 (later model as I recall) The FS-7 fan, The optional 300 and 1800 Hz filters. Supporting equipment include a Drake mic, PS-7 power supply with a Boxer fan (identical mounting), an RV-7 VFO all manuals in excellent condition and Service Manual.
>
> I recently discovered this TR-7 has been modified for continuous transmit. The owner was a MARS affiliate.
>
> The second link you offered brings up a question. Why is a TR-7 worth more than a TR-7/PS-7 combination?:Typo?
>
> TR-7 12 $400.00 $661.35 $1,250.00
> TR-7/PS-7 12 $250.00 $546.42 $800.00
>
> Always nice to meet another 'C' call!
>
> Bob
>
> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>>

>> To set a fair price for the radio, you really need to know which options are
>> intsalled:
>> Noise blanker
>> Optional filters
>> AUX-7
>> Fan
>>
>> Here are a couple of references:
>>
>> http://www.joetracker.com/prices/drake.htm
>>
>> http://www.aade.com/hampedia/drakep.htm
>>
>> Prices vary according to condition of the radio, options installed, accessories
>> included, serial number (and if it is a real "A" model or not), and current
>> demand.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>>
>> On Mon, 29 Apr 2013 17:59:01 -0000, bob_af6c wrote:
>>
>>> Last August I was asked to sell some equipment for an elderly ham. Included in the list of equipment is a Drake TR-7 Station. Most of the equipment sold, but there were no serious offers on the TR-7. According to the owner, the radio was working when removed from service around 10 years ago, with the exception of an intermittent in the mic connector.
>>>
>>> Earlier this month I decided I wanted to get the radio out of the garage and figured I needed to get it working. The mic connector was reinstalled, the radio fired up (after conditioning the capacitors in the PS-7) and put on the air on our club 10 meter net. Good reports were received and the radio seems to be working well. Power output into a dummy load is 140W (less on 15 and 10M).
>>>
>>> Physically, with the exception of the microphone, the equipment is very good with no major scratches or dents. The photo on the website makes the plastic over the display look scratched, but that is more the result of the head-on flash than the actual plastic.
>>>
>>> You can get the details of the radio at:
>>>
>>> http://www.w6ze.org/FOR-SALE/W5KGM_Sale.html
>>>
>>> Basically it includes the TR-7 (with DR7, NB7, FA7, 300 and 1800 Hz optional filters) PS-7, RV-7, Drake microphone, original manuals and the Service/Schematic manual).
>>>
>>> I'd like to sell it locally (Northern Orange County, CA) I currently have a price of $699 for the station, but wonder if that is excessive or perhaps too low? That price point was suggested by someone else.

>>>
>>> Bob - AF6C
>>>
>>>
>>>
>>
>> --
>> Ham Radio NU0C
>> Lincoln, Nebraska, U.S.S.A.
>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>>
>> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>>
>> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
>> http://incolor.inetnebr.com/jshorney
>> http://www.nebraskaghosts.org
>>
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> Yahoo! Groups Links
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13493. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 02:40:09 UTC
From: Garey Barrell
Topic: 13108 Message: 13493

Doug -

Sounds like you may have a short in the S-Meter wiring.

There are a couple of good service guys, WA8SAJ and WB4HFN are two of the best. They are backed up, but do good work. Course you don't learn anything that way!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> While troubleshooting the low 10M sensitivity last evening I lost R53, R187 trimmer, R168 and R71. I thought I had it traced down, replaced the burnt resistors and inserted a newer trimmer as a test. Upon power up, I instantly burnt all of the afore mentioned resistors for the exception of the trimmer.
>
> Do you offer repair services on the TR4 line or recommend someone to completely go through this thing. I have wasted way too much time and continue to come up short. Its time a professional take care of it for me.
>
> Thanks for your time,
>
> N9XTF
>
>
> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@...> wrote:
>> Garey,
>>
>> Yes I verified the voltage early on, the 6BZ6 that was in there was very black from over voltage. I also verified that the leads were dressed properly and went to the correct locations. That's not to say that I didn't miss something though. I purchased a dozen 12BZ6 tubes and have tried several of them to make sure that I did not have a soft tube. They all act the same.
>>
>> I neautralized the PA and it is very close on all bands. It was quite difficult to do this time, compared to my other drakes though.
>>
>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>> OK, I recall this one now. I typically have four or five of these

>>> 'projects' going at a time, and sometimes they run together! :-)
>>>
>>> Did you verify that you have 12V on the 12BZ6??
>>>
>>> Your erratic tuning sounds like neutralization. This wouldn't affect
>>> sensitivity on 10M though. Any time you have a stage or stages that
>>> are 'jittery' or jump around when tune, it's a good bet that you have
>>> a stability problem.
>>>
>>> It 'could' indicate a fixed capacitor breaking down, or a bad solder
>>> joint. Mica caps with large DC voltagesappliedto them can sometimes
>>> develop 'whiskers' that can short intermittently. And of course, bad
>>> grounds, or poor lead dress can cause instability as well.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>
>>> slowcountry1 wrote:
>>>> Garey,
>>>>
>>>> Yes, I have used the CD to attempt to trace everything that I have found modified and screwed up by the previous golden screw driver. I was unable to see this clearly enough on the CD's, its in a tight spot. I make a hand drawing and take pictures before I change anything to ensure that I place parts back where they came from however; this one was already in the wrong place so it went back wrong, oops!
>>>>
>>>> The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.
>>>>
>>>> The rig had a 6BZ6 at V-11 when I started. The rig calls for a 12BZ6 so that's the first thing I replaced. V-7 is a 12BA6 which I've swapped out a couple of times. The stage that I'm at is tolerable however; my idea was to dedicated this rig to 10/15M service, so this is why i'm concerned with sensitivity on 10M. My TR-4CW with the NB will be dedicated to the lower bands and my TR-6 for 6M.
>>>>
>>>> I have tried multiple harmonics of the calibrator signal; have not noticed anything any stronger from one to the other.
>>>>
>>>> Also, as suggested on my tuning complaint earlier in the series of messages, I DeOxit the Plate and loading caps and replaced the ball bearing grease. The plate and load caps are very smooth now and tuning is much smoother however; the plate cap still produces somewhat of a jumpy response in the tuning process. I have checked the grounds on the air variables as well. Is this possibly a coupling capacitor?
>>>>
>>>> I can not believe all of the foul connections and screwy modifications that I have run across on this one. I lost the filament voltage on two of the 6JB6s and the other 6volt

tubes the other night. The filament voltage lead off the first PA tube was partially cut and I did not notice it and then it finally broke off. After I get the darn thing working 100%, I'm going to have to go back and re-dress / replace some coax, wire and such that have iron burns and such from previous owners to make it look halfway decent. Its such a great radio its a shame its had such a rough life.
>>>>
>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>> Doug -
>>>>>
>>>>> Whoops! Those pesky connections insist on being made to the correct
>>>>> pin..... :-) This is one of the places where the CD comes in very
>>>>> handy. See my first message at the bottom of thisstring!
>>>>>
>>>>> I wouldn't worry about the Section G. problem. This methodof setting
>>>>> the BAL MOD was written for the early TR-4 with 4 pole filters
>>>>> (soupcan). The newer sixpole filters have sharper skirts, making the
>>>>> CAR OSC signal too far down to overcome idle current. Later BAL MOD
>>>>> adjustments need to be done with a scope or separate receiver and the
>>>>> adjustments made to minimize the carrier feedthrough. You should be
>>>>> able to null it almost to zero on the scope or well into the noise on
>>>>> a separate receiver.
>>>>>
>>>>> Have you tried listening to a different harmonic of the CAL? The level
>>>>> can vary quite a bit up there from harmonic to harmonic.
>>>>>
>>>>> I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at
>>>>> V11? Also, sub V7.
>>>>>
>>>>> Yes, the audio preamp stage is a big help.
>>>>>
>>>>> Progress, you're getting there.....
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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calibration. Any ideas here?
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>>>>>> Section G. Adjustment of Bal Modulator still does not produce and plate current above resting current.
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>>>>>> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
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>>>>>> Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.
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>>>>>> Thank you for your time,
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>>>>>>>
>>>>>>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
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>>>>>>> RF tune peaks signals on all bands as I expect it should.
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>>>>>>> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
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>>>>>>> After repairing T7 and T9, section J alignment all peaks as I understand it should.
>>>>>>>
>>>>>>> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
>>>>>>>
>>>>>>> I have not been able to source an O-Scope yet.
>>>>>>>
>>>>>>> At this point, I'm pretty much stuck in the mud.
>>>>>>>
>>>>>>> Doug N9XTF

>>>>>>>
>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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>>>>>>>>
>>>>>>>> Progress!
>>>>>>>>
>>>>>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
>>>>>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
>>>>>>>> RF TUNE peak as it should? If you can't get a meter reading, you
>>>>>>>> should be ableto hear the signal on an external receiver andtune for
>>>>>>>> loudest signal to verify tuning. Do all the adjustments in Section
>>>>>>>> VIII, para J peak as they should? Again if you can't get plate
>>>>>>>> current, tune for max signal in an external receiver.
>>>>>>>>
>>>>>>>> The problem(s) have to be in this area. Did you get access to a
>>>>>>>> scope? Makes these types of problems much easier to track down. You
>>>>>>>> can compare the input and output of various stages to see if you have
>>>>>>>> gain or perhaps loss onone or more bands. And be sure the
>>>>>>>> BANDoscillatoris running strong on the higher bands.
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>>>>>>>>>
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>>>>>>>>>
>>>>>>>>> With the selector switch in Cal, the S-Meter produces readings on the following bands;
>>>>>>>>>
>>>>>>>>> 80M S9+30
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>>>>>>>>> 20M S7
>>>>>>>>> 15M S1
>>>>>>>>> 10M no S reading change.
>>>>>>>>>
>>>>>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.

>>>>>>>>>
>>>>>>>>> I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
>>>>>>>>>
>>>>>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
>>>>>>>>>
>>>>>>>>> Thanks for all of your help,
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>>>>>>>>>> to CB and failed, and then either that person or someone else has
>>>>>>>>>> tried to return it to stock.
>>>>>>>>>>
>>>>>>>>>> You can certainly mount the cap on the terminals on the outside of the
>>>>>>>>>> transformer. There may be some coupling problems, but I doubt it.
>>>>>>>>>> Certainly worth trying until you find the right one. Sometimes these
>>>>>>>>>> caps are selected to account for variations in coil windings, plus
>>>>>>>>>> ferrites were not nearly as consistent from batch to batch as they are
>>>>>>>>>> today. Once you find a suitable value, I'd move it inside the can
>>>>>>>>>> just to be safe. Be sure and use stable capacitors such as silver
>>>>>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
>>>>>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
>>>>>>>>>> cap it would give you a starting point.
>>>>>>>>>>
>>>>>>>>>> It's certainly possible that a model had a different layout, although
>>>>>>>>>> I've not seen any significant variations. If you look in the
>>>>>>>>>> 'Versions' directory, there are a couple of Drake photos of different
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>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>> <www.k4oah.com>
>>>>>>>>>>
>>>>>>>>>> slowcountry1 wrote:
>>>>>>>>>>> Garey,
>>>>>>>>>>>
>>>>>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would

explain that? I know there are some slight differences in the schematics.
>>>>>>>>>>>
>>>>>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
>>>>>>>>>>>
>>>>>>>>>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
>>>>>>>>>>>
>>>>>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
>>>>>>>>>>>
>>>>>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
>>>>>>>>>>>
>>>>>>>>>>> Regards,
>>>>>>>>>>>
>>>>>>>>>>> Doug N9XTF
>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>>>>> Doug -
>>>>>>>>>>>>
>>>>>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
>>>>>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
>>>>>>>>>>>> critical. This is the best way to make sure everything is back where
>>>>>>>>>>>> it should be!
>>>>>>>>>>>>
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>>>>>>>>>>>>> Garey,
>>>>>>>>>>>>>
>>>>>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
>>>>>>>>>>>>>
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> Yahoo! Groups Links
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13494. RE: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 03:00:14 UTC
From: Walter Milton
Topic: 13108 Message: 13494

Garey,

Is the procedure to set the BAL MOD on your TR4 any disk?

Walt, KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Monday, April 29, 2013 12:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: TR-4 Repair

Doug -

Whoops! Those pesky connections insist on being made to the correct pin..... :-) This is one of the places where the CD comes in very handy. See my first message at the bottom of thisstring!

I wouldn't worry about the Section G. problem. This methodof setting the BAL MOD was written for the early TR-4 with 4 pole filters (soupcan). The newer sixpole filters have sharper skirts, making the CAR OSC signal too far down to overcome idle current. Later BAL MOD adjustments need to be done with a scope or separate receiver and the adjustments made to minimize the carrier feedthrough. You should be able to null it almost to zero on the scope or well into the noise on a separate receiver.

Have you tried listening to a different harmonic of the CAL? The level can vary quite a bit up there from harmonic to harmonic.

I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at V11? Also, sub V7.

Yes, the audio preamp stage is a big help.

Progress, you're getting there.....

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>>>
>>>>> slowcountry1 wrote:
>>>>>> Garey,
>>>>>>
>>>>>> I've noticed that there are several things different between the
picture on the CD and the rig. Were there some differences between the rig
serial numbers that would explain that? I know there are some slight
differences in the schematics.
>>>>>>
>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate
that it is inside T-9. Is this typical? I looked at the cap but it did not
have a value on it, it is a ceramic disc type. I can check it with my
meter. I'm really getting tired of removing and installing this can, its in
a really tight place for soldering and unsoldering, LOL.
>>>>>>
>>>>>> I was thinking of installing it external to the can to facilitate
trying different values. I imagine that this will effect tuning if I do so,
what are your thoughts here?
>>>>>>
>>>>>> It had crossed my mind that some magic screwdriver may have used
this on 11M, but the crystals in it are all for 10M. This is not to say
someone did not try to restore it to operation.
>>>>>>
>>>>>> In addition,It was stored in less that ideal conditions; moisture
and some other junk were allowed in the radio. Whomever worked on it did
not understand mechanical or basic soldering techniques either.
>>>>>>
>>>>>> Regards,
>>>>>>
>>>>>> Doug N9XTF
>>>>>> --- In DrakeRadio@yahoogroups.com
<mailto:DrakeRadio%40yahoogroups.com> , Garey Barrell <k4oah@> wrote:
>>>>>>> Doug -
>>>>>>>
>>>>>>> One other thing. Compare your repaired areas with the photos inthe

>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
>>>>>>> critical. This is the best way to make sure everything is back
where
>>>>>>> it should be!
>>>>>>>
>>>>>>> 73, Garey - K4OAH
>>>>>>> Glen Allen, VA
>>>>>>>
>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>> <www.k4oah.com>
>>>>>>>
>>>>>>> slowcountry1 wrote:
>>>>>>>>> Garey,
>>>>>>>>>
>>>>>>>>> Here is the work that I have done this week and their results. I
have a number of questions that will be included in the text.
>>>>>>>>>
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13495. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 03:15:35 UTC
From: Garey Barrell
Topic: 13108 Message: 13495

Walt -

No, but there's really nothing special about it. You just follow the instructions inthe original manual (also on the CD) and instead of watching the PLATE meter for the null, you either use a scope on the output or just listen on a separate receiver. Just pick a band, say 40M, switch to SSB, key the PTT with the XMTR GAIN at 0. Listen on your separate receiver to the transmitter frequency and you'll probably hear a weak carrier. Peak up the RF TUNE, PLATE and LOADcaps for maximum signal in the receiver. Then begin adjusting CAR BAL pot and C127 (top of chassis, right rear) for minimum signal in the receiver. You can use this same setup to peak T14 etc., as part of the CAR OSC setup.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Walter Milton wrote:
> Garey,
>
>
>
> Is the procedure to set the BAL MOD on your TR4 any disk?
>
>
>
> Walt, KA2NJF
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Monday, April 29, 2013 12:33 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: TR-4 Repair
>
>
>
>
>
> Doug -
>

> Whoops! Those pesky connections insist on being made to the correct
> pin..... :-) This is one of the places where the CD comes in very
> handy. See my first message at the bottom of thisstring!
>
> I wouldn't worry about the Section G. problem. This methodof setting
> the BAL MOD was written for the early TR-4 with 4 pole filters
> (soupcan). The newer sixpole filters have sharper skirts, making the
> CAR OSC signal too far down to overcome idle current. Later BAL MOD
> adjustments need to be done with a scope or separate receiver and the
> adjustments made to minimize the carrier feedthrough. You should be
> able to null it almost to zero on the scope or well into the noise on
> a separate receiver.
>
> Have you tried listening to a different harmonic of the CAL? The level
> can vary quite a bit up there from harmonic to harmonic.
>
> I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at
> V11? Also, sub V7.
>
> Yes, the audio preamp stage is a big help.
>
> Progress, you're getting there.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
>> Garey,
>>
>> Here is an update on the TR-4 progress;
>>
>> Thanks to a local ham, KC9LAD, he checked rf at the different stages and
> everything seemed to be amplifying at the suspect tubes. After sitting a
> parts rig next to my TR-4, we found that a mica cap (don't remember which
> number it is) was placed on the wrong leg to T-9. After moving it to the
> correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We
> went back through all of the alignment and everything was pretty close.
> Section E, adjustment of Injection Couplers had to be done without the
> alignment load on 10M. When using the alignment load the S-meter has no
> deflection and cannot determine proper calibration. Any ideas here?
>> Section G. Adjustment of Bal Modulator still does not produce and plate
> current above resting current.
>> All bands appear to have the appropriate sensitivity except for 10M. As
> stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with
> produce S-7. Is this just normal behavior for the TR-4 or am I still off
> somewhere?

>> Growing extremely tired of the low audio from the TR-4, I removed the
> TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I
> now have output audio consistent with my TR-4Cw. This was quite a chore
> obtaining sufficient lead lengths on a number of the cables.
>> Thank you for your time,
>>
>> Doug N9XTF
>>
>> --- In DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com> ,
> "slowcountry1" <dcoffman@...> wrote:
>>> Garey,
>>>
>>> One of the first things I did was check the band oscillator. All of the
> voltages to TP were positive so I adjusted L1, L2 and L5; I was able to
> bring them down but only close to zero, could not obtain a negative
> voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to
> -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced
> V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it
> wasn't any better). I was then able to get 40M to -1.512VDC 15M to
> -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3,
> assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these
> from a sale somewhere but I didn't have any 6EA8 new replacements.
>>> One point of note, when I have the switch in Cal, the tone produced from
> the speaker changes significantly if I touch or have my finger near the V1
> tube.
>>> RF tune peaks signals on all bands as I expect it should.
>>>
>>> In calibrate mode, where should I put a wire coil to listen for 10M and
> 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest
> tone out of the TR-4 speaker.
>>> After repairing T7 and T9, section J alignment all peaks as I understand
> it should.
>>> I went through and touched up a few solder joints that looked suspicious
> but have been unable to find or fix any other problems. 15M and 10M receive
> still appear very very weak. (Volume all the way up and strong signals very
> hard to hear with no S-meter deflection.)
>>> I have not been able to source an O-Scope yet.
>>>
>>> At this point, I'm pretty much stuck in the mud.
>>>
>>> Doug N9XTF
>>>
>>> --- In DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> , Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> Progress!
>>>>
>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does

>>>> RF TUNE peak as it should? If you can't get a meter reading, you
>>>> should be ableto hear the signal on an external receiver andtune for
>>>> loudest signal to verify tuning. Do all the adjustments in Section
>>>> VIII, para J peak as they should? Again if you can't get plate
>>>> current, tune for max signal in an external receiver.
>>>>
>>>> The problem(s) have to be in this area. Did you get access to a
>>>> scope? Makes these types of problems much easier to track down. You
>>>> can compare the input and output of various stages to see if you have
>>>> gain or perhaps loss onone or more bands. And be sure the
>>>> BANDoscillatoris running strong on the higher bands.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>
>>>>> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can
> tunes correctly. I went back through and the adjustment of the mixer and RF
> coils and peaked all of them.
>>>>> I removed the plate and screen leads and used the load as directed to
> adjust the injection couplers. I cannot get an S-Meter reading on either
> 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has
> to be all the way up and strong signals are still faint.
>>>>> With the selector switch in Cal, the S-Meter produces readings on the
> following bands;
>>>>> 80M S9+30
>>>>> 40M S9+10
>>>>> 20M S7
>>>>> 15M S1
>>>>> 10M no S reading change.
>>>>>
>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5
> and 10 seem dead.
>>>>> I went back through the rig and again loosened and tightened every
> screw, have done this several times. I have looked at T1, T2 and T3 and it
> does not appear that these have been touched. I have looked through the rig
> and don't see any modifications other than the ones that I have fixed.
>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a
> direction to point me in to look for the deficiency on 10 and 15M?
>>>>> Thanks for all of your help,
>>>>>
>>>>> Doug N9XTF
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com

> <mailto:DrakeRadio%40yahoogroups.com> , Garey Barrell <k4oah@> wrote:
>>>>>> Doug -
>>>>>>
>>>>>> It is not unusual for there to be caps and resistors inside
>>>>>> transformers. I suppose if it's not marked it may be a bypass or no
>>>>>> telling. I suspect what has happened is that someone tried to move it
>>>>>> to CB and failed, and then either that person or someone else has
>>>>>> tried to return it to stock.
>>>>>>
>>>>>> You can certainly mount the cap on the terminals on the outside of
> the
>>>>>> transformer. There may be some coupling problems, but I doubt it.
>>>>>> Certainly worth trying until you find the right one. Sometimes these
>>>>>> caps are selected to account for variations in coil windings, plus
>>>>>> ferrites were not nearly as consistent from batch to batch as they
> are
>>>>>> today. Once you find a suitable value, I'd move it inside the can
>>>>>> just to be safe. Be sure and use stable capacitors such as silver
>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
>>>>>> cap it would give you a starting point.
>>>>>>
>>>>>> It's certainly possible that a model had a different layout, although
>>>>>> I've not seen any significant variations. If you look in the
>>>>>> 'Versions' directory, there are a couple of Drake photos of different
>>>>>> models that may help determine if something is abnormal.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> slowcountry1 wrote:
>>>>>>> Garey,
>>>>>>>
>>>>>>> I've noticed that there are several things different between the
> picture on the CD and the rig. Were there some differences between the rig
> serial numbers that would explain that? I know there are some slight
> differences in the schematics.
>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate
> that it is inside T-9. Is this typical? I looked at the cap but it did not
> have a value on it, it is a ceramic disc type. I can check it with my
> meter. I'm really getting tired of removing and installing this can, its in
> a really tight place for soldering and unsoldering, LOL.
>>>>>>> I was thinking of installing it external to the can to facilitate
> trying different values. I imagine that this will effect tuning if I do so,
> what are your thoughts here?
>>>>>>> It had crossed my mind that some magic screwdriver may have used

> this on 11M, but the crystals in it are all for 10M. This is not to say
> someone did not try to restore it to operation.
>>>>>>> In addition,It was stored in less that ideal conditions; moisture
> and some other junk were allowed in the radio. Whomever worked on it did
> not understand mechanical or basic soldering techniques either.
>>>>>>> Regards,
>>>>>>>
>>>>>>> Doug N9XTF
>>>>>>> --- In DrakeRadio@yahoogroups.com
> <mailto:DrakeRadio%40yahoogroups.com> , Garey Barrell <k4oah@> wrote:
>>>>>>>> Doug -
>>>>>>>>
>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
>>>>>>>> critical. This is the best way to make sure everything is back
> where
>>>>>>>> it should be!
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>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>> <www.k4oah.com>
>>>>>>>>
>>>>>>>> slowcountry1 wrote:
>>>>>>>>> Garey,
>>>>>>>>>
>>>>>>>>> Here is the work that I have done this week and their results. I
> have a number of questions that will be included in the text.
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>> Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links

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13496. Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 03:29:36 UTC
From: Don Cunningham
Topic: 4504 Message: 13496

Garey,

This is probably VERY simple, but please go over the adjustment of the carrier oscillator using the external receiver. I keep seeing you reference that, but can you break it down a bit for us old Rednecks that aren't very smart???? HI
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6287 - Release Date: 04/30/13

[Non-text portions of this message have been removed]

13497. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 13:44:13 UTC
From: Garey Barrell
Topic: 4504 Message: 13497

Hi Don -

Nosecret handshake required!! :-)

According to the manual, you unbalance the BAL MOD to allow some carrier through. Peak T14. Then key the transmitter in SSB with GAIN at 0, then switch between USB and LSB, then watching for equal plate current adjust C2. Peak the transformers and then re-null the carrier. With the earlier radios you would see some signal above the idle current due to the unbalanced carrier.This method worked fine for the 4 pole filters in the T-4X and the early TR-4s. When Drake changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter skirts were so sharp that it was impossible to get enough carrier through even when the BAL MOD was drastically unbalanced.

So, we know there was 'some' carrier getting through, just not enough to show on the meter above the idle current. Simple, we just needed a more sensitive detector to be able to 'see' the carrier and then null it.

There are two easy ways to do this. One is to hook your scope across the dummy load, and proceed as above. The other, more sensitive detector is a separate receiver tuned to the output frequency of the transmitter. Unbalance the BAL MOD and tune in the transmitter signal. Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum signal. Thenproceed as above to peak the appropriate transformers, center the CAR OSC, and then adjust the pot and cap to null the CAR OSC. You should be able to get it down into the noise level of the receiver.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> This is probably VERY simple, but please go over the adjustment of the carrier oscillator using the external receiver. I keep seeing you reference that, but can you break it down a bit for us old Rednecks that aren't very smart???? HI
> 73,
> Don, WB5HAK
>

13498. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 15:32:34 UTC
From: Don Cunningham
Topic: 4504 Message: 13498

Thanks, Garey. I was not sure I'd remember a secret handshake, for sure!

I would have been close, and that is an easy one. I'll give that a shot soon on the pesky T4XB I have. It just wouldn't show enough to know where you are, and i got good audio reports on USB, "tinny" reports on LSB, so I knew where to look.

Tks again.
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6289 - Release Date: 05/01/13

[Non-text portions of this message have been removed]

13499. For Garey, et al: My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-04-26 14:18:18 UTC
From: Howard Traxler
Topic: 13499 Message: 13499

Hello again Garey. Sure hate to keep bothering you with this thing, but,

Finally got the XYL down there to watch the meter while I fired up the TR-4 as you suggested. I think she's getting a bit tired of my TR-4. Wish I could find an effective way to check it myself.

In any case, setting it up as you say (below), listening on a nearby receiver, there is a signal increase when I move the RF Tune and Plate Tune and not so much when I increase the drive gain. Plate current does not rise from the 100 ma biased point.

Does that give you any ideas what to check next? Will the xmtr not working cause the rcvr to not work? That was the first thing I noticed; the receiver went dead

Thanks, Garey.

73,
Howard, WA9RYF
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, April 09, 2013 1:17 PM
Subject: Re: [DrakeRadio] My non-working TR-4

> Howard -
>
> I have several of these 'projects' going. Need to refresh a couple of
> things.
>
> Are you able to set the PA idle current to 0.1A?
>
> Under test conditions:
>
> 7.000 MHz
> Mode SSB
> LSB
> RF TUNE around 12 o'clock +/- 2 (adjust for peak)
> GAIN 0
> PTT closed
> KEY either unplugged or closed
> PLATE and LOAD adjust for peak.
>
> Plate current should show 0.1A (idle current)
>
> Increase GAIN while 'watching' PLATE current. Signal strength should
> increase with GAIN, and PLATE current should be 'dipped' with PLATE
> control.

>
> IF PLATE current does NOT increase whenGAIN is increased we have a
> problem. If PLATE current increases but output does NOT, then check
> your power meter!
>
> The slide switch on the rear panel only dims the panel lamps for
> night-time / mobile use.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
>> Garey,
>>
>> Further results from testing:
>> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load
>>
>> R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic connection. Not enough output to register on my relative power out squawker (I use for tuning).
>>
>> TR-4 still doesn't receive when connected to antenna.
>>
>> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>>
>> Thanks, Garey
>>
>> 73
>> Howard, WA9RYF
>>
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>> Yahoo! Groups Links
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> Yahoo! Groups Links
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Yahoo! Groups Links

----- Original Message -----
From: "Howard Traxler" <howard@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, April 24, 2013 12:12 AM
Subject: Re: [DrakeRadio] My non-working TR-4

> Hello again Garey,
>
> Finally got the XYL down there to watch the meter while I fired up the TR-4 as you suggested. I think she's getting a bit tired of my TR-4. Wish I could find an effective way to check it myself.
>
> In any case, setting it up as you say (below), listening on a nearby receiver, there is a signal increase when I move the RF Tune and Plate Tune and not so much when I increase the drive gain. Plate current does not rise from the 100 ma biased point.
>
> Does that give you any ideas what to check next? Will the xmtr not working cause the rcvr to not work? That's the first thing I noticed; the receiver went dead
>
> Thanks, Garey.
>
> 73,
> Howard, WA9RYF
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, April 09, 2013 1:17 PM
> Subject: Re: [DrakeRadio] My non-working TR-4
>
>
>> Howard -
>>
>> I have several of these 'projects' going. Need to refresh a couple of
>> things.
>>
>> Are you able to set the PA idle current to 0.1A?
>>
>> Under test conditions:
>>
>> 7.000 MHz

>> Mode SSB
>> LSB
>> RF TUNE around 12 o'clock +/- 2 (adjust for peak)
>> GAIN 0
>> PTT closed
>> KEY either unplugged or closed
>> PLATE and LOAD adjust for peak.
>>
>> Plate current should show 0.1A (idle current)
>>
>> Increase GAIN while 'watching' PLATE current. Signal strength should
>> increase with GAIN, and PLATE current should be 'dipped' with PLATE
>> control.
>>
>> IF PLATE current does NOT increase whenGAIN is increased we have a
>> problem. If PLATE current increases but output does NOT, then check
>> your power meter!
>>
>> The slide switch on the rear panel only dims the panel lamps for
>> night-time / mobile use.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> Howard Traxler wrote:
>>> Garey,
>>>
>>> Further results from testing:
>>> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load
>>>
>>> R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic connection. Not enough output to register on my relative power out squawker (I use for tuning).
>>>
>>> TR-4 still doesn't receive when connected to antenna.
>>>
>>> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>>>
>>> Thanks, Garey
>>>
>>> 73
>>> Howard, WA9RYF

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>>> Yahoo! Groups Links
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13500. RE: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-01 22:27:18 UTC
From: Walter Milton
Topic: 4504 Message: 13500

Garey,

How does one hook their O-scope across the dummy load? I do not have enough room on my work bench to place a second radio. So that route is out for me at present. I have an O-scope and would like to try that method. Thanks

Walt, KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, May 01, 2013 9:44 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment

Hi Don -

Nosecret handshake required!! :-)

According to the manual, you unbalance the BAL MOD to allow some carrier through. Peak T14. Then key the transmitter in SSB with GAIN at 0, then switch between USB and LSB, then watching for equal plate current adjust C2. Peak the transformers and then re-null the carrier. With the earlier radios you would see some signal above the idle current due to the unbalanced carrier.This method worked fine for the 4 pole filters in the T-4X and the early TR-4s. When Drake changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter skirts were so sharp that it was impossible to get enough carrier through even when the BAL MOD was drastically unbalanced.

So, we know there was 'some' carrier getting through, just not enough to show on the meter above the idle current. Simple, we just needed a more sensitive detector to be able to 'see' the carrier and then null it.

There are two easy ways to do this. One is to hook your scope across the dummy load, and proceed as above. The other, more sensitive detector is a separate receiver tuned to the output frequency of the transmitter. Unbalance the BAL MOD and tune in the transmitter signal. Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum signal. Thenproceed as above to peak the appropriate transformers, center the CAR OSC, and then adjust the pot and cap to null the CAR OSC. You should be able to get it down into the noise level of the receiver.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> This is probably VERY simple, but please go over the adjustment of the carrier oscillator using the external receiver. I keep seeing you reference that, but can you break it down a bit for us old Rednecks that aren't very smart???? HI
> 73,
> Don, WB5HAK
>

[Non-text portions of this message have been removed]

13501. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 00:19:08 UTC
From: William Houghton
Topic: 4504 Message: 13501

I use adapters:

- BNC "T" that has two females and one male.
- a male PL-259 to BNC female.
- a BNC male to SO-239 female.

Connect the male of the BNC "T" to the PL-259 to BNC female.
Attach the PL-259 to the rig.
Attach the BNC male to SO-239 adapter to one of the BNC females of the "T".
Connect the coax to the dummy load to the S0-239.
The scope probe will usually fit into the center of the remaining BNC female. I also have a BNC male to aligator clip leads adapter that I can use.

From: Walter Milton <wmilton@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 1, 2013 3:27:22 PM
Subject: RE: [DrakeRadio] Carrier Oscillator Adjustment

Garey,

How does one hook their O-scope across the dummy load? I do not have enough room on my work bench to place a second radio. So that route is out for me at present. I have an O-scope and would like to try that method.
Thanks

Walt, KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, May 01, 2013 9:44 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment

Hi Don -

Nosecret handshake required!! :-)

According to the manual, you unbalance the BAL MOD to allow some carrier through. Peak T14. Then key the transmitter in SSB with GAIN at 0, then switch between USB and LSB, then watching for equal plate current adjust C2. Peak the transformers and then re-null the carrier. With the earlier radios you would see some signal above the idle current due to the unbalanced carrier.This method worked fine for the 4 pole filters in the T-4X and the early TR-4s. When Drake changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter skirts were so sharp that it was impossible to get enough carrier

through even when the BAL MOD was drastically unbalanced.

So, we know there was 'some' carrier getting through, just not enough to show on the meter above the idle current. Simple, we just needed a more sensitive detector to be able to 'see' the carrier and then null it.

There are two easy ways to do this. One is to hook your scope across the dummy load, and proceed as above. The other, more sensitive detector is a separate receiver tuned to the output frequency of the transmitter. Unbalance the BAL MOD and tune in the transmitter signal. Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum signal. Thenproceed as above to peak the appropriate transformers, center the CAR OSC, and then adjust the pot and cap to null the CAR OSC. You should be able to get it down into the noise level of the receiver.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
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> This is probably VERY simple, but please go over the adjustment of the carrier oscillator using the external receiver. I keep seeing you reference that, but can you break it down a bit for us old Rednecks that aren't very smart???? HI
> 73,
> Don, WB5HAK
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13502. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 00:19:37 UTC
From: David Winfree
Topic: 13482 Message: 13502

Some RCA's are tall, some are just right!

On Tue, Apr 30, 2013 at 4:57 PM, Steve Wedge <w1es1982@...> wrote:

> **
>
>
> Drat. I guess that's why they're cheaper.
>
> Thanks for the tip, Garey. I think I'll take the medicine and get Syls or
> GE's.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
> From: Garey Barrell
> Sent: Tuesday, April 30, 2013 11:55 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Westinghouse 6JB6's
>
> Steve -
>
> I've had mixed results with Westinghouse. I assume they do NOT
> manufacture 6JB6s, just remark them. I've had a couple that _would
> not_ neutralize, although they 'looked' identical inside, even with
> changes in the neutralization cap(s). I had another pair someone
> brought with a unit to repair, allegedly new in box, looked new, but
> very low output (50W). Don't recall any dimensional problems, but you
> never know since they could have been BUILT by anyone.......
>
> I avoid 'em.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
> > Yes, I know there have been discussions, but I can't find info pertinent

> to Westinghouse 6JB6's. Will they dimensionally fit into the RF cage in a
> T-4whatever or TR-4whatever?
> >
> > 73,
> >
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> > [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

13503. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 00:32:31 UTC
From: Ethan Blanton
Topic: 4504 Message: 13503

William Houghton spake unto us the following wisdom:
> I use adapters:
>
> - BNC "T" that has two females and one male.
> - a male PL-259 to BNC female.
> - a BNC male to SO-239 female.
>
> Connect the male of the BNC "T" to the PL-259 to BNC female.
> Attach the PL-259 to the rig.
> Attach the BNC male to SO-239 adapter to one of the BNC females of the "T".
> Connect the coax to the dummy load to the S0-239.
> The scope probe will usually fit into the center of the remaining BNC female. I
> also have a BNC male to aligator clip leads adapter that I can use.

Be careful doing this at power, many scope front ends won't withstand the voltage of 100W into a 50 ohm load (70.7 V). You can divide the signal with non-inductive high-value resistors of the appropriate ratio. If the divisor resistors sum to at least, say, 5kohm, they won't substantially affect the impedance of the dummy load. You can also use a capacitive tap; a metal box with two SO-239s, a wire between, and a BNC with an insulated wire dangling into the box but not connected works great. You can increase or decrease coupling (and thus the voltage at the scope) by bringing the insulated wire closer to the pass-through wire or even coiling it around.

You can also use a capacitive divider, but its impedance in parallel with the load is going to be frequency-dependent.

For nulling the carrier none of the above is likely to be critical, because you won't be putting that much power into the dummy load. It's not uncommon for scope front ends to only withstand 10-20V at HF, though, which is only a few watts of power into 50 ohms, so be careful!.

Ethan

13504. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 00:50:24 UTC
From: Garey Barrell
Topic: 4504 Message: 13504

Walt -

Kinda depends upon the scope. Simplest is just a 'TEE' connector at
the dummy load. You don't have much transmitter outputdoing the test,
BUT You MUST remember to unhook the scope before you key the
transmitter for output power!! 200W into 50 ohms is only 100 Volts,
which most scope attenuators can handle. But to be safe, disconnect
the scope before keying at full power.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Walter Milton wrote:
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>
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> enough room on my work bench to place a second radio. So that route is out
> for me at present. I have an O-scope and would like to try that method.
> Thanks
>
>
>
> Walt, KA2NJF
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Wednesday, May 01, 2013 9:44 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment
>
>
>
>
>
>
> Hi Don -
>
> Nosecret handshake required!! :-)
>

> According to the manual, you unbalance the BAL MOD to allow some
> carrier through. Peak T14. Then key the transmitter in SSB with GAIN
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> carrier. With the earlier radios you would see some signal above the
> idle current due to the unbalanced carrier.This method worked fine for
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> changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter
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> through even when the BAL MOD was drastically unbalanced.
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> to show on the meter above the idle current. Simple, we just needed a
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> the dummy load, and proceed as above. The other, more sensitive
> detector is a separate receiver tuned to the output frequency of the
> transmitter. Unbalance the BAL MOD and tune in the transmitter signal.
> Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13505. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 00:58:23 UTC
From: Garey Barrell
Topic: 13482 Message: 13505

David -

I've never seen 'too tall' 6JB6s from RCA. Their specs say maximum
seated height is 3.125", and the cage is 3.375". None of the data
that I have shows over 3.125" max height. But I know they're out there!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> thereto.
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>> From: Garey Barrell
>> Sent: Tuesday, April 30, 2013 11:55 AM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Westinghouse 6JB6's
>>
>> Steve -
>>
>> I've had mixed results with Westinghouse. I assume they do NOT
>> manufacture 6JB6s, just remark them. I've had a couple that _would
>> not_ neutralize, although they 'looked' identical inside, even with
>> changes in the neutralization cap(s). I had another pair someone
>> brought with a unit to repair, allegedly new in box, looked new, but

>> very low output (50W). Don't recall any dimensional problems, but you
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>> Steve Wedge wrote:
>>> Yes, I know there have been discussions, but I can't find info pertinent
>> to Westinghouse 6JB6's. Will they dimensionally fit into the RF cage in a
>> T-4whatever or TR-4whatever?
>>

13506. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 01:03:04 UTC
From: Garey Barrell
Topic: 4504 Message: 13506

Ethan -

Excellent point. That's what I was just cautioning about. "Good"
scopes often do NOT withstand RF voltages well at all.

For CAR BAL, it's not of concern, but you gotta be careful. A piece
of insulated hookup wire, with a little bit stripped off of the end,
clipped witha 10x probe, and the wire pushed through a holein the cage
about halfway down works great for full power monitoring! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ethan Blanton wrote:
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>>
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>> - a male PL-259 to BNC female.
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>> Connect the coax to the dummy load to the S0-239.
>> The scope probe will usually fit into the center of the remaining BNC female. I
>> also have a BNC male to aligator clip leads adapter that I can use.
> Be careful doing this at power, many scope front ends won't withstand
> the voltage of 100W into a 50 ohm load (70.7 V). You can divide the
> signal with non-inductive high-value resistors of the appropriate
> ratio. If the divisor resistors sum to at least, say, 5kohm, they
> won't substantially affect the impedance of the dummy load. You can
> also use a capacitive tap; a metal box with two SO-239s, a wire
> between, and a BNC with an insulated wire dangling into the box but
> not connected works great. You can increase or decrease coupling (and
> thus the voltage at the scope) by bringing the insulated wire closer
> to the pass-through wire or even coiling it around.
>
> You can also use a capacitive divider, but its impedance in parallel
> with the load is going to be frequency-dependent.
>
> For nulling the carrier none of the above is likely to be critical,

> because you won't be putting that much power into the dummy load. It's
> not uncommon for scope front ends to only withstand 10-20V at HF,
> though, which is only a few watts of power into 50 ohms, so be
> careful!.
>
> Ethan
>
>
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> Yahoo! Groups Links
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13507. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 02:26:17 UTC
From: Fred or Ski
Topic: 4504 Message: 13507

We used an RF probe on the output connector with the audio input connector shorted, while being employed at the Heathkit Service Department. That always seemed to work well to null the carrier as you could vary the range on the meter to increase the sensitivity and I was able to get the carrier null output down below .05 volts RF on both sidebands. That was in the late '60s with the SB100, SB400, HW100 series radios.

Fred (Ski) Skalski-WB8YXI
Mattawan, MI

[Non-text portions of this message have been removed]

13508. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 02:39:50 UTC
From: Fred or Ski
Topic: 4504 Message: 13508

That was with the output connector with a 50 ohm load connected.
Ski

[Non-text portions of this message have been removed]

13509. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 02:42:16 UTC
From: Don Cunningham
Topic: 4504 Message: 13509

This thread is getting a bit warped. We are NOT concerned with carrier null, the original question was about the Carrier Oscillator adjustment to insure that both sidebands are as centered as you can get so the audio response of each sideband is close to the same. The "tinney" audio reports come when this is misadjusted.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6290 - Release Date: 05/01/13

[Non-text portions of this message have been removed]

13510. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 02:39:11 UTC
From: Richard Knoppow
Topic: 4504 Message: 13510

```
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 01, 2013 5:50 PM
Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment

> Walt -
>
> Kinda depends upon the scope. Simplest is just a 'TEE'
> connector at
> the dummy load. You don't have much transmitter
> outputdoing the test,
> _BUT_ You MUST remember to unhook the scope before you
> key the
> transmitter for output power!! 200W into 50 ohms is only
> 100 Volts,
> which most scope attenuators can handle. But to be safe,
> disconnect
> the scope before keying at full power.
>
> 73, Garey - K4OAH
> Glen Allen, VA

I use a 10:1 scope probe set for 10X and a T connector.
For using a receiver usually there is enough leakage from
the final to hear it fine with a foot or two of wire on the
receiver. The scope makes it easier to center the carrier
frequency for equal level on the two sideband filters.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
```

13511. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 02:44:43 UTC
From: Richard Knoppow
Topic: 13482 Message: 13511

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 01, 2013 5:58 PM
Subject: Re: [DrakeRadio] Westinghouse 6JB6's

> David -
>
> I've never seen 'too tall' 6JB6s from RCA. Their specs
> say maximum
> seated height is 3.125", and the cage is 3.375". None of
> the data
> that I have shows over 3.125" max height. But I know
> they're out there!!
>
> 73, Garey - K4OAH
> Glen Allen, VA

I have exactly one 6JB6 that is too tall but can't
remember who made it, an odd brand I think. Its much too
tall, a very odd tube.
As far a Westinghouse they certainly made industrial
tubes and were a member of the RCA club that was
cross-licensed for all patents but I don't know if they made
receiving tubes, I can't think of any I've ever seen. RCA,
General Electric, Sylvania, Hytron (later became CBS) and a
couple of others actually make the tubes carrying their
brands. Ken-Rad was a division of GE, the name means
Kentucky Radio and I think they were originally independant.
They were in Owensborough Ky which was also the GE tube and
small lamp factory. I think Zenith tubes were mostly
Sylvania but I don't know who made Philco tubes.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13512. Re: Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 04:21:39 UTC
From: radiomanL
Topic: 4504 Message: 13512

Garey
not sure about all of them , My HN-31 cantenna has a dectector built in to convert the RF to a DC output voltage . could that be used instead of the O-scope ? probably intended to be used with a VTVM .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13513. Re: Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 04:29:32 UTC
From: radiomanL
Topic: 13482 Message: 13513

I used Sylvania and GE tubes for my replacements for all the repairs . I recall that tubes made by sylvania for others had a code number 312 on the envelope . not sure about the green sylvania's . most of the ones I used were yellow printed . the tubes by other manufactures probably had similar codes for ID purpose .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13514. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 11:59:50 UTC
From: Steve Wedge
Topic: 4504 Message: 13514

I prefer to use a x10 probe either hooked up to inside the chassis at the connector, or fashion a way of attaching the probe to the tee. Most scopes made in the last 40 years can go to 50V/div this way.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 01, 2013 8:50 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment

Walt -

Kinda depends upon the scope. Simplest is just a 'TEE' connector at
the dummy load. You don't have much transmitter outputdoing the test,
BUT You MUST remember to unhook the scope before you key the
transmitter for output power!! 200W into 50 ohms is only 100 Volts,
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Walter Milton wrote:
> Garey,
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>
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> enough room on my work bench to place a second radio. So that route is out
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> Thanks
>
>
>
> Walt, KA2NJF
>
>
>

> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Wednesday, May 01, 2013 9:44 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment
>
>
>
>
>
> Hi Don -
>
> Nosecret handshake required!! :-)
>
> According to the manual, you unbalance the BAL MOD to allow some
> carrier through. Peak T14. Then key the transmitter in SSB with GAIN
> at 0, then switch between USB and LSB, then watching for equal plate
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> carrier. With the earlier radios you would see some signal above the
> idle current due to the unbalanced carrier.This method worked fine for
> the 4 pole filters in the T-4X and the early TR-4s. When Drake
> changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter
> skirts were so sharp that it was impossible to get enough carrier
> through even when the BAL MOD was drastically unbalanced.
>
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> to show on the meter above the idle current. Simple, we just needed a
> more sensitive detector to be able to 'see' the carrier and then null it.
>
> There are two easy ways to do this. One is to hook your scope across
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> transmitter. Unbalance the BAL MOD and tune in the transmitter signal.
> Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum
> signal. Thenproceed as above to peak the appropriate transformers,
> center the CAR OSC, and then adjust the pot and cap to null the CAR
> OSC. You should be able to get it down into the noise level of the
> receiver.
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13515. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 13:30:44 UTC
From: Garey Barrell
Topic: 4504 Message: 13515

Don -

Then that's MY fault!! :-) I understood you were having trouble
adjusting the BAL MOD using the procedure in the manual.

Centering the CAR OSC is best done with a counter. If the filters are
ok, then setting the CAR OSC to 9.000 MHz should work fine. If you
don't have accessto a counter, then do the unbalance of the BAL
MOD.Assume you are using a sensitive enough detector to be able to see
it, and then switching back and forth between USB and LSB while
adjusting the CAR OSCfor equal output. This is not quite as good, as
there is some ripple in the filter passbands, meaning that the
identical levels aren't exactly on the same spot of the filter response.

Yet another method is using a scope with a two-tone generator (present
in the Heath Monitorscopes and others) and setting the CAR OSC for the
best response on both sidebands.

One more, and I'll shut up. If you have a calibrated audio oscillator
(or a counter capable of counting the audio, included in a lot of the
Chinese DMMs!), you can vary the input frequency to the MIC input.
Quickest is to just note the frequency where the output drops quickly
at the high and low ends. Should be around 400 - 2900 Hz, and more
importantly similar on both sidebands.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> This thread is getting a bit warped. We are NOT concerned with carrier null, the original question was about the Carrier Oscillator adjustment to insure that both sidebands are as centered as you can get so the audio response of each sideband is close to the same. The "tinney" audio reports come when this is misadjusted.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3272 / Virus Database: 3162/6290 - Release Date: 05/01/13
>
>

> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

13516. Re: [DrakeRadio] Re: Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 13:32:25 UTC
From: Garey Barrell
Topic: 4504 Message: 13516

Andrew -

Yes, all the Cantennas have a diode detector on them. That MAY be
sensitive enough, assuming the diode hasn't been smoked! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

radiomanL wrote:
> Garey
> not sure about all of them , My HN-31 cantenna has a dectector built in to convert the RF to a DC output voltage . could that be used instead of the O-scope ? probably intended to be used with a VTVM .
> Andrew
> kd5pnt
>
>

13517. Re: Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 14:16:25 UTC
From: johnkf7z
Topic: 13482 Message: 13517

The code 312 that you mention is a Sylvania manufacture date code. The date code was used by the dealers for tube manufacturers to determine if an early tube failure qualified to be replaced under warranty. Tubes from different manufacturing lots would have a different date code.

RCA used a reddish-orange ink to print their logo and the tube ID on their tubes. When the tube is heated up, that ink would turn a muddy gray color. In case the buyer wanted to return an "unused" tube for refund, that color change was used by the dealer to determine if a tube would be accepted back for resale as unused.

I don't know for sure about other tube makers than RCA, but I suspect the others used the same kind of color change ink.

John K7KEY

> I used Sylvania and GE tubes for my replacements for all the repairs . I recall that tubes made by sylvania for others had a code number 312 on the envelope . not sure about the green sylvania's . most of the ones I used were yellow printed . the tubes by other manufactures probably had similar codes for ID purpose .
> Andrew
> kd5pnt

13518. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 14:55:51 UTC
From: Don Cunningham
Topic: 4504 Message: 13518

Maybe that's why I was having trouble getting my head around that last one you sent :-)!! I'll try one or more of those, as I do have a good counter AND several two tone generators. I should be able to master that this time.

Also, my "dummy load" is really a 30db attenuator that was used in broadcasting for that very purpose, as I understand it, to "proof" radio/tv stations. Rated at 2500W, so may attenuate too much, but I'll see if it works to null the carrier. I have a small dummy load screwed onto it, and it handles all my amps just fine. A friend let it go for $20. Now, that was a deal and I drove to Dallas quickly with a twenty dollar bill, hi.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3272 / Virus Database: 3162/6291 - Release Date: 05/02/13

[Non-text portions of this message have been removed]

13519. Re: [DrakeRadio] Westinghouse 6JB6's

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 15:20:55 UTC
From: Abqcooks@...
Topic: 13482 Message: 13519

On a humorous note I have an old TV tube made by CBS-Hytron (a "division of Columbia Broadcasting System")
and its advertising logo on the box says the tube is "for new set sparkle" .
I chuckle at that thinking that if only I had a tube socket located somewhere from the neck up I could plug that tube in
and 'sparkle' like I did in my 20s ! Jim

-----Original Message-----
From: Richard Knoppow <1oldlens1@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Wed, May 1, 2013 8:45 pm
Subject: Re: [DrakeRadio] Westinghouse 6JB6's

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 01, 2013 5:58 PM
Subject: Re: [DrakeRadio] Westinghouse 6JB6's

> David -
>
> I've never seen 'too tall' 6JB6s from RCA. Their specs
> say maximum
> seated height is 3.125", and the cage is 3.375". None of
> the data
> that I have shows over 3.125" max height. But I know
> they're out there!!
>
> 73, Garey - K4OAH
> Glen Allen, VA

I have exactly one 6JB6 that is too tall but can't
remember who made it, an odd brand I think. Its much too
tall, a very odd tube.
As far a Westinghouse they certainly made industrial
tubes and were a member of the RCA club that was
cross-licensed for all patents but I don't know if they made
receiving tubes, I can't think of any I've ever seen. RCA,
General Electric, Sylvania, Hytron (later became CBS) and a
couple of others actually make the tubes carrying their
brands. Ken-Rad was a division of GE, the name means
Kentucky Radio and I think they were originally independant.
They were in Owensborough Ky which was also the GE tube and
small lamp factory. I think Zenith tubes were mostly
Sylvania but I don't know who made Philco tubes.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13520. Re: TR-7 Station - What is it worth?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 17:31:23 UTC
From: bob_af6c
Topic: 13471 Message: 13520

Garey -

Thanks for your input. I'm not interested in getting top dollar for the equipment; I'm more interested in it getting into the hands of someone who can put it to good use. I've talked to the elderly owner and he is really just happy to have it out of his place (he's now living with his son's family).

Right now I'm trying to avoid shipping. A few years ago I shipped a Drake L-4, and the hassle packing it (three boxes - the tubes and power supply each went in their own box.) I'd sure like to find a buyer in the local Southern California area (I'm in Orange County).

Bob

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Bob -
>
> You've run into one of the problems with that type of list.... It
> only reports on a 'sale', without regard for what is included, or
> not. The TR-7 'may' have had three filters and a Noise Blanker in it,
> or a fan, or ...
>
> Best pricing I have found is to look at the completed sales on eBay
> and eHam and evaluate what each one was and it's condition. You see a
> pattern after awhile! Then knock about 20% off of the average eBay
> price and you'll be close for a direct sale.
>
> If you absolutely want to get the most for it, take outall the
> accessories and put it all in separate auctions.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> bob_af6c wrote:
> > Thanks for the links Jim! Those should help.
> >
> > As for the included equipment, it was all spelled out on the web link I provided including serial #S. The TR7 has the DR-7 display board, the NB-7 (later model as I recall) The FS-7 fan, The optional 300 and 1800 Hz filters. Supporting equipment include a Drake mic, PS-7 power supply with a Boxer fan (identical mounting), an RV-7 VFO all manuals in excellent condition and Service Manual.
> >

> > I recently discovered this TR-7 has been modified for continuous transmit. The owner was a MARS affiliate.
> >
> > The second link you offered brings up a question. Why is a TR-7 worth more than a TR-7/PS-7 combination?:Typo?
> >
> > TR-7 12 $400.00 $661.35 $1,250.00
> > TR-7/PS-7 12 $250.00 $546.42 $800.00
> >
> > Always nice to meet another 'C' call!
> >
> > Bob
> >
> > --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@> wrote:
> >>
> >> To set a fair price for the radio, you really need to know which options are
> >> intsalled:
> >> Noise blanker
> >> Optional filters
> >> AUX-7
> >> Fan
> >>
> >> Here are a couple of references:
> >>
> >> http://www.joetracker.com/prices/drake.htm
> >>
> >> http://www.aade.com/hampedia/drakep.htm
> >>
> >> Prices vary according to condition of the radio, options installed, accessories
> >> included, serial number (and if it is a real "A" model or not), and current
> >> demand.
> >>
> >> 73
> >>
> >> -Jim
> >> NU0C
> >>
> >>
> >> On Mon, 29 Apr 2013 17:59:01 -0000, bob_af6c wrote:
> >>
> >>> Last August I was asked to sell some equipment for an elderly ham. Included in the list of equipment is a Drake TR-7 Station. Most of the equipment sold, but there were no serious offers on the TR-7. According to the owner, the radio was working when removed from service around 10 years ago, with the exception of an intermittent in the mic connector.
> >>>
> >>> Earlier this month I decided I wanted to get the radio out of the garage and figured I needed to get it working. The mic connector was reinstalled, the radio fired up (after conditioning the capacitors in the PS-7) and put on the air on our club 10 meter net. Good reports were received and the radio seems to be working well. Power output into a dummy load is 140W (less on 15 and 10M).

> >>>
> >>> Physically, with the exception of the microphone, the equipment is very good with no major scratches or dents. The photo on the website makes the plastic over the display look scratched, but that is more the result of the head-on flash than the actual plastic.
> >>>
> >>> You can get the details of the radio at:
> >>>
> >>> http://www.w6ze.org/FOR-SALE/W5KGM_Sale.html
> >>>
> >>> Basically it includes the TR-7 (with DR7, NB7, FA7, 300 and 1800 Hz optional filters) PS-7, RV-7, Drake microphone, original manuals and the Service/Schematic manual).
> >>>
> >>> I'd like to sell it locally (Northern Orange County, CA) I currently have a price of $699 for the station, but wonder if that is excessive or perhaps too low? That price point was suggested by someone else.
> >>>
> >>> Bob - AF6C
> >>>
> >>>
> >>>
> >>
> >> --
> >> Ham Radio NU0C
> >> Lincoln, Nebraska, U.S.S.A.
> >> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
> >>
> >> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
> >>
> >> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> >> http://incolor.inetnebr.com/jshorney
> >> http://www.nebraskaghosts.org
> >>
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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>

13521. T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-02 21:14:31 UTC
From: Thomas Thomson
Topic: 606 Message: 13521

I recently bought what I thought was a T-4XB and ended up with an XC. Is this a good thing or is the XB a better radio?

13522. Re: [DrakeRadio] T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 00:35:24 UTC
From: Garey Barrell
Topic: 606 Message: 13522

Thomas -

Not a whole lot of difference between them. The T-4XC has a fewmore SS stages, but functionally it is identical to the T-4XB.

The differences are in the receiver. The natural 'pair' would be an R-4C which is an excellent receiver. It IS a more expensive receiver than the "B", especially when you consider that the crystal IF filters for the "C" are optional at extra cost, as is the Noise Blanker.

Many prefer the "B" receiver because it has four L/C filter bandwidthsstandard, and a noise blanker. Some also prefer the gentler slopes of the L/C filters in the Passband Tuner over the sharp edged crystal filters in the "C".

One operational advantage the "C" _pair_ offer is locked oscillators so that transceive operation is always exactly on frequency. The "B" has two separate crystal oscillators thatwill drift slightly with temperature changes, meaning that transceiveoperation isn't always 'perfect'.

So. A lot depends upon what modes you operate, do you prefer to transceive(typically only pertinent to SSB operation,) do you tend to rag-chew or dig through pileups for DX, or are you into contesting?

If you need the sharpest filters for DXing or contesting, the you'd want to consider the R-4C with the additional filters. If you just want to indulge in day-to-day ham conversations you might prefer the smoother, gentler sound of the R-4B. Kind of like comparing a NASCAR auto with a family sedan. Both will get you to the grocery store, but if you like the noise and performance and can tolerate the stiff shocks, the NASCAR version is going to outperform the family sedan!

Bottom line, either transmitter will work fine with either receiver, only giving up the locked transceive capability with the R-4B.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Thomas Thomson wrote:
> I recently bought what I thought was a T-4XB and ended up with an XC. Is this a good thing or is the XB a better radio?
>

>

13523. Re: [DrakeRadio] T-4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 01:39:51 UTC
From: Steve Wedge
Topic: 606 Message: 13523

If you bought it for the price of an older set, you got a good deal, Thomas!

As Garey points out, it can be used with any of the other receivers.

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Thursday, May 02, 2013 8:35 PM
Subject: Re: [DrakeRadio] T-4XC

Thomas -

Not a whole lot of difference between them. The T-4XC has a fewmore
SS stages, but functionally it is identical to the T-4XB.

The differences are in the receiver. The natural 'pair' would be an
R-4C which is an excellent receiver. It IS a more expensive receiver
than the "B", especially when you consider that the crystal IF filters
for the "C" are optional at extra cost, as is the Noise Blanker.

Many prefer the "B" receiver because it has four L/C filter
bandwidthsstandard, and a noise blanker. Some also prefer the gentler
slopes of the L/C filters in the Passband Tuner over the sharp edged
crystal filters in the "C".

One operational advantage the "C" _pair_ offer is locked oscillators
so that transceive operation is always exactly on frequency. The "B"
has two separate crystal oscillators thatwill drift slightly with
temperature changes, meaning that transceiveoperation isn't always
'perfect'.

So. A lot depends upon what modes you operate, do you prefer to
transceive(typically only pertinent to SSB operation,) do you tend to
rag-chew or dig through pileups for DX, or are you into contesting?

If you need the sharpest filters for DXing or contesting, the you'd
want to consider the R-4C with the additional filters. If you just
want to indulge in day-to-day ham conversations you might prefer the
smoother, gentler sound of the R-4B. Kind of like comparing a NASCAR
auto with a family sedan. Both will get you to the grocery store, but

if you like the noise and performance and can tolerate the stiff
shocks, the NASCAR version is going to outperform the family sedan!

Bottom line, either transmitter will work fine with either receiver,
only giving up the locked transceive capability with the R-4B.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Thomas Thomson wrote:
> I recently bought what I thought was a T-4XB and ended up with an XC. Is this a good thing or is the XB a better radio?
>
>

[Non-text portions of this message have been removed]

13524. Re: [Drakelist] T-4XC Transmitter Woes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 12:55:12 UTC
From: Steve Wedge
Topic: 13524 Message: 13524

Rod -

On the surface, this sounds like a contact issue and I would suspect the switch contacts around the band oscillator. If you can't receive when using the XMTR as the frequency control of a set of Twins, check the band oscillator.

If you have a scope you can easily monitor the output of the crystal oscillator as you change bands. Also, be sure, if you just bought this rig, that there are five crystals underneath the PTO area.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: "James Bridgers" <n4bno@...>
Sent: Friday, May 03, 2013 6:57 AM
To: <Drakelist@...>
Subject: [Drakelist] T-4XC Transmitter Woes

> I have a Drake T-4XC transmitter with full output on 40 meters and zero
> output on all the other bands. Anyone have any suggestions on where to
> start troubleshooting this problem? Any suggestions would be greatly
> appreciated.
> Thanks
> Rod N4BNO
>
> _____
> Drakelist mailing list
> Drakelist@...
> http://mailman.zerobeat.net/mailman/listinfo/drakelist

13525. Re: [DrakeRadio] Re: [Drakelist] T-4XC Transmitter Woes

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 13:57:54 UTC
From: Garey Barrell
Topic: 13524 Message: 13525

James -

One quick check, is the XTALS switch in the NORM position??

Otherwise, sounds like Steve has it nailed. If you are set up for transceive, try transceiving with receiver control. The transmitter should work on all bands.

Good point to check and be sure all the BAND crystals are present.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Rod -
>
> On the surface, this sounds like a contact issue and I would suspect the
> switch contacts around the band oscillator. If you can't receive when using
> the XMTR as the frequency control of a set of Twins, check the band
> oscillator.
>
> If you have a scope you can easily monitor the output of the crystal
> oscillator as you change bands. Also, be sure, if you just bought this rig,
> that there are five crystals underneath the PTO area.
>
> ----------
> From: "James Bridgers" <n4bno@...>
> Sent: Friday, May 03, 2013 6:57 AM
> To: <Drakelist@...>
> Subject: [Drakelist] T-4XC Transmitter Woes
>
>> I have a Drake T-4XC transmitter with full output on 40 meters and zero
>> output on all the other bands. Anyone have any suggestions on where to
>> start troubleshooting this problem? Any suggestions would be greatly
>> appreciated.
>> Thanks
>> Rod N4BNO
>>
>>

13526. Connecting 4C Twins to al-80a

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 15:01:11 UTC
From: Dave
Topic: 13526 Message: 13526

Has anyone used an al-80a as an amp for the C line twins? I have the Amp working but was curious on the AGC connections. I have an rca cable from the AGC connection on the MS-4 to the AGC line on the amp. I can back the power back by adjusting the AGC adjustment control on the amp but after testing the output and transmitting for a few minutes I lose audio output all together. Any ideas? Dave

13527. XTAL trade

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 15:29:11 UTC
From: Steve Wedge
Topic: 13527 Message: 13527

I've got some extra crystals for the Twins and I need a 15m crystal for a TR-4.

I've got rocks for 160, 10CW, 17, 12, higher 10m segments, as well as (cough) 11m. Will swap any of these for a 15m crystal for a TR-4 (xtal frequency is 35.5 MHz).

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13528. You are invited to the Drake Forum at Hamvention 2013

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 15:39:36 UTC
From: k9sqg
Topic: 13528 Message: 13528

You are cordially invited to attend...

The Drake Forum

Saturday, May 18, 2013.
10:30-11:30 AM.
Room 2.

Excellent presentations.
Ask the Experts Q&A.

Free collectable Drake logo pens for first 100 attendees.
Free raffle tickets.
Many prizes including new, dual band, HT.

More details under Forums at DARA's Hamvention website.
View some previous forums at VIMEO website.

73,

Drake Forum Committee

13529. R-4 FS

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 17:21:33 UTC
From: Steve Wedge
Topic: 13529 Message: 13529

I'd dearly love to keep this receiver but I gotta pay the bills. It's with a tear in my eye that I'm prepping my R-4 for sale.

This is in the most incredible, original condition of any early Drake radio that I have ever seen!

The copper chassis is as close to flawless as I've ever seen (two small "freckles" are all that's evident) and from what I can tell, all the tubes are original. The factory inspection tag is still on the cord (s/n 0936) and indicates it was tested on St. Patty's Day of 1965. All the tube date codes pre-date the test date by 1 - 3 months. All are RCA or Sylvania and have the original markings on them.

This set only needed for me to blow out the dust, re-grease the PTO and PBT and align it. The alignment will be finished by the end of the weekend.

This set is as close to museum quality as you will find. I also have the matching speaker, which is also in near-mint shape!

Email me off-list for pricing and photos. I'll have the photos ready as soon as the alignment is done.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13530. Re: [DrakeRadio] T-4XC vs T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 20:03:48 UTC
From: Thomas Thomson
Topic: 606 Message: 13530

Thanks for the help. I'm pleased. I'll use this with my nemly refurbished R-4B.
73 Tom

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Thu, May 2, 2013 6:36:25 PM
Subject: Re: [DrakeRadio] T-4XC

If you bought it for the price of an older set, you got a good deal, Thomas!

As Garey points out, it can be used with any of the other receivers.

73,

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!

> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, May 02, 2013 8:35 PM
> Subject: Re: [DrakeRadio] T-4XC
>
> Thomas -
>
> Not a whole lot of difference between them. The T-4XC has a fewmore
> SS stages, but functionally it is identical to the T-4XB.
>
> The differences are in the receiver. The natural 'pair' would be an
> R-4C which is an excellent receiver. It IS a more expensive receiver
> than the "B", especially when you consider that the crystal IF filters
> for the "C" are optional at extra cost, as is the Noise Blanker.
>
> Many prefer the "B" receiver because it has four L/C filter
> bandwidthsstandard, and a noise blanker. Some also prefer the gentler
> slopes of the L/C filters in the Passband Tuner over the sharp edged
> crystal filters in the "C".
>
> One operational advantage the "C" _pair_ offer is locked oscillators
> so that transceive operation is always exactly on frequency. The "B"
> has two separate crystal oscillators thatwill drift slightly with
> temperature changes, meaning that transceiveoperation isn't always
> 'perfect'.

So. A lot depends upon what modes you operate, do you prefer to transceive(typically only pertinent to SSB operation,) do you tend to rag-chew or dig through pileups for DX, or are you into contesting?

If you need the sharpest filters for DXing or contesting, the you'd want to consider the R-4C with the additional filters. If you just want to indulge in day-to-day ham conversations you might prefer the smoother, gentler sound of the R-4B. Kind of like comparing a NASCAR auto with a family sedan. Both will get you to the grocery store, but if you like the noise and performance and can tolerate the stiff shocks, the NASCAR version is going to outperform the family sedan!

Bottom line, either transmitter will work fine with either receiver, only giving up the locked transceive capability with the R-4B.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Thomas Thomson wrote:
> I recently bought what I thought was a T-4XB and ended up with an XC. Is this a good thing or is the XB a better radio?
>
>

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13531. Re: [DrakeRadio] T-4XC vs T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 20:20:12 UTC
From: Garey Barrell
Topic: 606 Message: 13531

Tom -

Attached is the procedure to set the Transceive Align. You would not need it if you were using an R-4C, but with the R-4B it is required if you want to have both units on the same frequency.

Just substitute 'T-4XC' where it says 'T-4XB' and it'll work fine.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Thomas Thomson wrote:
> Thanks for the help. I'm pleased. I'll use this with my nemly refurbished R-4B.
> 73 Tom
>
>
>
>

[Non-text portions of this message have been removed]

13532. T-4XC - annoying note in SSB mode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-03 22:48:17 UTC
From: Steve Wedge
Topic: 13532 Message: 13532

I'm suspecting that an electrolytic is drying out, but I offer this up to the group:

Just received a T-4XC. It's in nice shape and has full output. I may end up keeping this one. When the MODE switch is in SSB, however, I get a constant tone, about middle G (so, around 350 - 400 Hz) - regardless of the settings of the other controls. If I unplug the INJ cable, the noise ceases. This is when I have the transmitter paired to my R-4B (not a C). The tone volume is independent of settings of VOX, ANTI VOX and GAIN controls

In CW mode, there's no tone.

I will be going through this anyway but am looking for any quick assessments as to why this tone manifests itself only in SSB and only when the INJ jacks are connected between the two.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13533. RE: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 01:01:53 UTC
From: Walter Milton
Topic: 4504 Message: 13533

Garey,

The O-scope I have is an Tektronix 2445 150 MHZ.

Walt, KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Wednesday, May 01, 2013 8:50 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment

Walt -

Kinda depends upon the scope. Simplest is just a 'TEE' connector at the dummy load. You don't have much transmitter outputdoing the test, _BUT_ You MUST remember to unhook the scope before you key the transmitter for output power!! 200W into 50 ohms is only 100 Volts, which most scope attenuators can handle. But to be safe, disconnect the scope before keying at full power.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Walter Milton wrote:
> Garey,
>
>
>
> How does one hook their O-scope across the dummy load? I do not have
> enough room on my work bench to place a second radio. So that route is
out
> for me at present. I have an O-scope and would like to try that method.
> Thanks
>
>
>
> Walt, KA2NJF
>
>
>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]

On
> Behalf Of Garey Barrell
> Sent: Wednesday, May 01, 2013 9:44 AM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment
>
>
>
>
>
> Hi Don -
>
> Nosecret handshake required!! :-)
>
> According to the manual, you unbalance the BAL MOD to allow some
> carrier through. Peak T14. Then key the transmitter in SSB with GAIN
> at 0, then switch between USB and LSB, then watching for equal plate
> current adjust C2. Peak the transformers and then re-null the
> carrier. With the earlier radios you would see some signal above the
> idle current due to the unbalanced carrier.This method worked fine for
> the 4 pole filters in the T-4X and the early TR-4s. When Drake
> changed to 8 pole filters, (T-4XB and TR-4 ~s/n 19500,) the filter
> skirts were so sharp that it was impossible to get enough carrier
> through even when the BAL MOD was drastically unbalanced.
>
> So, we know there was 'some' carrier getting through, just not enough
> to show on the meter above the idle current. Simple, we just needed a
> more sensitive detector to be able to 'see' the carrier and then null it.
>
> There are two easy ways to do this. One is to hook your scope across
> the dummy load, and proceed as above. The other, more sensitive
> detector is a separate receiver tuned to the output frequency of the
> transmitter. Unbalance the BAL MOD and tune in the transmitter signal.
> Peak all the usual suspects, RF TUNE, PLATE and LOAD, for maximum
> signal. Thenproceed as above to peak the appropriate transformers,
> center the CAR OSC, and then adjust the pot and cap to null the CAR
> OSC. You should be able to get it down into the noise level of the
> receiver.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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> Don Cunningham wrote:
>> Garey,
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>> This is probably VERY simple, but please go over the adjustment of the

> carrier oscillator using the external receiver. I keep seeing you
reference
> that, but can you break it down a bit for us old Rednecks that aren't
very
> smart???? HI
>> 73,
>> Don, WB5HAK
>>
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13534. Re: [DrakeRadio] T-4XC - annoying note in SSB mode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 02:14:06 UTC
From: Garey Barrell
Topic: 13532 Message: 13534

Have you done the Transceive Align??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I'm suspecting that an electrolytic is drying out, but I offer this up to the group:
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> Just received a T-4XC. It's in nice shape and has full output. I may end up keeping this one. When the MODE switch is in SSB, however, I get a constant tone, about middle G (so, around 350 - 400 Hz) - regardless of the settings of the other controls. If I unplug the INJ cable, the noise ceases. This is when I have the transmitter paired to my R-4B (not a C). The tone volume is independent of settings of VOX, ANTI VOX and GAIN controls
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> In CW mode, there's no tone.
>
> I will be going through this anyway but am looking for any quick assessments as to why this tone manifests itself only in SSB and only when the INJ jacks are connected between the two.
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> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
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[Non-text portions of this message have been removed]

13535. Re: [DrakeRadio] Carrier Oscillator Adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 02:18:11 UTC
From: Garey Barrell
Topic: 4504 Message: 13535

Walt -

That'll work just fine. Look back over the last few messages, there were several suggestions for ways to sample the output signal of the transmitter.

I would advise leaving the scope connected while transmitting without investigating the breakdown voltage of your probe and scope input. 200W input to a 50 ohm load is almost 300 Volts peak-to-peak, exceeding the range of many 'good' probes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Walter Milton wrote:
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> The O-scope I have is an Tektronix 2445 150 MHZ.
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> Walt, KA2NJF
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> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Wednesday, May 01, 2013 8:50 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment
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>
> Walt -
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> which most scope attenuators can handle. But to be safe, disconnect
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Walter Milton wrote:
>> Garey,
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>> How does one hook their O-scope across the dummy load? I do not have
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>> Thanks
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>> Walt, KA2NJF
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>> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> [mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
> On
>> Behalf Of Garey Barrell
>> Sent: Wednesday, May 01, 2013 9:44 AM
>> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>> Subject: Re: [DrakeRadio] Carrier Oscillator Adjustment
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>> Hi Don -
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>> Nosecret handshake required!! :-)
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>> carrier through. Peak T14. Then key the transmitter in SSB with GAIN
>> at 0, then switch between USB and LSB, then watching for equal plate
>> current adjust C2. Peak the transformers and then re-null the
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>> idle current due to the unbalanced carrier.This method worked fine for

>> the 4 pole filters in the T-4X and the early TR-4s. When Drake
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>> transmitter. Unbalance the BAL MOD and tune in the transmitter signal.
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>> receiver.
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>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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13536. Re: [DrakeRadio] T-4XC vs T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 02:20:38 UTC
From: Robert Logan
Topic: 606 Message: 13536

Hey, Gary I'm rebuilding AC-4 and getting ready to get my T-4XC/R4 really up to snuff with full alignment. Where can I find that attachment, please? Thank you. Bob, NZ5A

Sent from my iPhone

On May 3, 2013, at 3:20 PM, Garey Barrell <k4oah@...> wrote:

Tom -

Attached is the procedure to set the Transceive Align. You would not
need it if you were using an R-4C, but with the R-4B it is required if
you want to have both units on the same frequency.

Just substitute 'T-4XC' where it says 'T-4XB' and it'll work fine.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Thomas Thomson wrote:
> Thanks for the help. I'm pleased. I'll use this with my nemly refurbished R-4B.
> 73 Tom
>
>
>
>

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[Non-text portions of this message have been removed]

13537. Re: [DrakeRadio] T-4XC vs T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 02:30:52 UTC
From: Garey Barrell
Topic: 606 Message: 13537

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Robert Logan wrote:
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> Sent from my iPhone
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> Tom -
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>
> Just substitute 'T-4XC' where it says 'T-4XB' and it'll work fine.
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> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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> Thomas Thomson wrote:
>> Thanks for the help. I'm pleased. I'll use this with my nemly refurbished R-4B.
>> 73 Tom
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13538. Re: [DrakeRadio] T-4XC - annoying note in SSB mode

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 02:37:16 UTC
From: Steve Wedge
Topic: 13532 Message: 13538

Not yet with this one. Didn't think of that...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Friday, May 03, 2013 10:14 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XC - annoying note in SSB mode

Have you done the Transceive Align??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
> I'm suspecting that an electrolytic is drying out, but I offer this up to the group:
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> Just received a T-4XC. It's in nice shape and has full output. I may end up keeping this one. When the MODE switch is in SSB, however, I get a constant tone, about middle G (so, around 350 - 400 Hz) - regardless of the settings of the other controls. If I unplug the INJ cable, the noise ceases. This is when I have the transmitter paired to my R-4B (not a C). The tone volume is independent of settings of VOX, ANTI VOX and GAIN controls
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13539. Re: Issue Tuning a T-4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 04:18:04 UTC
From: kf5str
Topic: 13456 Message: 13539

Thanks Richard. I think I'm getting the hang of it. The watt meter made it much easier. The dip is hard to see on the radio's meter and I wasn't even sure it was there until somebody told me it would be very slight. The swr/watt meter also reminded me of the high swr on the antenna I'm using so will have to get a tuner in the near future. I dont want to worry about damaging the transmitter. Any tuner recommendations? Also I discovered the mic jack is not the standard 1/4 size. Do you know what it is? I've read the D-104 mics work well with tube radios but the few I've seen on ebay all have pinned connectors. Did Astatic offer those mics with the right connector or did Drake owners have to add the plug if they wanted to use that particular mic?

Dave

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "kf5str" <kf5str@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, April 28, 2013 7:18 PM
> Subject: [DrakeRadio] Issue Tuning a T-4xc
>
>
> > Hello -
> >
> > I recently acquired a T-4XC / R-4B station and seem to be
> > having a problem getting the transmitter tuned. This
> > is my first tube set and have no prior experience with
> > them. Im having trouble getting past step b from the
> > owner's manual
> > where I'm trying to dip the plate current. The
> > instructions say to advance the gain to 12 o'clock, then
> > adjust the
> > plate control for a plate current dip. Problem is Im not
> > seeing the dip. Is there something missing or that Im
> > supposed to
> > be doing that is not covered in the manual?
> >
> > Thanks!
> >
> I don't know which version of the manual you have but
> the one in my files, probably from BAMA, is quite strangely
> organized. I first getting an on-line manual for the T4XB
> which is a little better organized. The two transmitters are
> very similar. Second suggestion is to order Garrey Barrell's
> CD on the C line and, since you have a B line receiver maybe

> his B line disc too. They are not expensive and are IMO
> absolute necessities if you want to get the best out of your
> equipment.
> You need a decent dummy load, have you one?
> The procedure is as follows:
> Connect a 50 ohm dummy load that can dissipate the
> output of the transmitter.
> Set the gain control at minimum and the load control at
> minimum (completely counter-clockwise).
> Set the Mode contol at SSB.
> After a warm up of a few minutes set the bias according
> to the instructions. When the sideband selector is in USB
> and the gain control at minimum there will be no drive so
> the plate current shown on the meter is the bias current.
> The correct setting is 70 ma. If you can't get this value
> there is a problem and you should shut down the transmitter
> until you can make some measurements.
> To tune start with the gain, plate tune and plate load
> all completely CCW.
> Choose a band. The book suggests 80 meters and that
> will do. Set the RF tune at about the center of the 80
> meter segment. Before doing this check that the slow motion
> pointer is not mis-aligned by turning the control fully
> counter-clockwise and looking at the position of the red
> pointer; it should be at the counter-clockwise end of the
> calibrated scale, i.e., the bottom of the 160 meter segment.
> If its not push it there with your finger, its a spring fit
> on the shaft of the tune adjustment.
> Now, set the RF Tune to about the center of the 80
> meter segment and set the main tuning control at about the
> middle of the 80 meter band, say 3700 Khz.
> Now, put the function switch on TUNE. Very carefully
> raise the level of the GAIN control until you see some
> upward deflection of the plate meter, you want to get a
> level you can just see. When you have that keep your
> fingers on the GAIN control and move the RF TUNE control to
> peak the meter reading. As the plate current comes up keep
> it at a very low level by turning the gain back down. As
> quickly as you can set the RF Tune to a peak and then move
> the Plate Tune control clockwise until you get a dip. If you
> can't get a dip drop the gain back to zero quickly and shut
> the transmitter down. If you get a dip then bring the gain
> up and check the RF Tune to make sure its peaked. Then pull
> out the Plate Tune knob to switch the meter to RF Out and
> increase the loading to bring it up, then let the knob go
> back in and recheck the plate dip. Alternate between output
> power and plate current until you have the maximum power you
> can get. Always dip the plate current last. Now move the
> Gain control up and the power should increase. Now re-tune
> the Plate Load and Plate Tuning again. If you are loading

> into a resistive load and the amplifier is properly
> neutralized you should be able to see a peak in the _output_
> at the same time as the plate current dips with tuning. Note
> that as you approach maximum loading there will be very
> little dip as you tune through resonance. The power should
> always peak at the current minimum.
> This tuning process is very much simpler and faster
> than this description suggests. Once you have found the
> initial dip there will be little change as the loading is
> increased.
> I find it very helpful to have an external power meter
> on the output. That allows me to see the relative action of
> the plate tuning and loading without having to switch.
> I must reinforce Garrey's warning about running the
> amplifier out of tune for more than a couple of seconds.
> The tubes used in the Drake and many other transmitters of
> the period have little margin for overload. It doesn't take
> much to ruin them. When that happens the power output is
> seriously reduced. If handled with care these tubes will
> last for many years.
> Another suggestion: obtain a small fan to cool the
> final tubes. It does not have to move much air. I use a
> small 115V AC fan I got from All Electronics here in Los
> Angeles, they probably have them on-line. I put a couple of
> protective screens (Also from All) and used some stick on
> foam weatherstipping around the edges. The fan just lies on
> top of the cabinet over the final cage. It should blow out,
> that is _suck_ the hot air from over the tubes. That way it
> will also draw cool air over most of the chassis. I put a
> lamp switch in the line for mine. Simple but keeps the tubes
> and the whole transmitter cool.
> Please let us know what progress you make with this.
> The TR-4C and B are excellent little transmitters with specs
> as good as any current ricebox.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

13540. Re: [DrakeRadio] Re: Issue Tuning a T-4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 06:14:19 UTC
From: Richard Knoppow
Topic: 13456 Message: 13540

----- Original Message -----
From: "kf5str" <kf5str@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, May 03, 2013 9:18 PM
Subject: [DrakeRadio] Re: Issue Tuning a T-4xc

> Thanks Richard. I think I'm getting the hang of it. The
> watt meter made it much easier. The dip is hard to see on
> the radio's meter and I wasn't even sure it was there
> until somebody told me it would be very slight. The
> swr/watt meter also reminded me of the high swr on the
> antenna I'm using so will have to get a tuner in the near
> future. I dont want to worry about damaging the
> transmitter. Any tuner recommendations? Also I discovered
> the mic jack is not the standard 1/4 size. Do you know
> what it is? I've read the D-104 mics work well with tube
> radios but the few I've seen on ebay all have pinned
> connectors. Did Astatic offer those mics with the right
> connector or did Drake owners have to add the plug if they
> wanted to use that particular mic?
>
> Dave

If you mean the dip after increasing loading it is hard
to see. However, if the amplifier is neutralized correctly
the dip will coincide with the peak in RF output. So, once
loading has been brought up to the maximum level the plate
resonance is best seen by looking for a peak in the output.
Once you get used to tuning up the Drake you can tune
any linear amplifier that isn't automatic. Some have more
adjustments for grid tuning or drive but all are essentially
the same.
The mic jack is 3/16ths inch also used by Collins and a
standard on aircraft radios. While they are supposed to be
rare they are not. The plugs including the right-angle plug,
are made by Switchcraft as type S-230 and are available from
many places. Someone changed the jack on my T4XB to a 1/4
inch jack. It was well done so I've just left it alone but
don't suggest modifying the rig. My TR-4 has the original
plug.
The D-104 is a well respected microphone designed for
good speech intelligibility but is not the most pleasant to
listen to. It has about the right rising characteristic to
boost speech in noise. The problem with crystal mics is that
they want to work into an open circuit. The microphone

element looks like a capacitor so any resistance in series with it acts like a high pass filter. Most vacuum tube amps have just about high enough impedance so that the mic doesn't sound tinny.
After testing a number of microphones (I collect them) I found the Electro-Voice 664 seems to get the best reports and sounds best to my ear. There are many newer mics that would be just as good. A cardioid microphone has the advantage of discriminating against background noise which makes you signal sound better on the air. It is also less sensitive to pick up from the receiver speaker making the anti-vox more effective.
Nearly all microphones came originally with bare wires. You just remove whatever plug is on it and rewire it with what you need. The wiring for the plug is simple, the mic goes between the sleeve and ring, the push to talk button (if you use one) goes to the tip. If you don't have push to talk leave the tip unconnected.
There are data sheets for nearly all microphones on the web. They will tell you what the pin connections or wire color code is for a particular microphone.
BTW, there is a good web site dedicated to Drake radios at:

http://www.wb4hfn.com/

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13541. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 12:09:14 UTC
From: slowcountry1
Topic: 13108 Message: 13541

Garey,

Ok, I'm back at it. Going back over the rig I have discovered T-14 has been modified, or at least it has been opened, and the associated wiring around it has been modified. I have compared it to a couple TR-4Cw parts rigs and the wiring in this area is quite different. I cannot find a picture on the internet, showing the area, with a serial number close to mine to verify that this was not the original configuration. Is there anything in this area that would effect 10 and 15M receive?

I went through the S-Meter chain and was unable to find a short. I disconnected the meters, made sure the wiring was not shorted where they exit the mounting plate etc. I did not find any source for the problem however; I replaced R-71 with a flameproof 500 ohm 1/2 watt resistor and all seems to be fine in this area and now have the receiver working again. I have no clue here.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Sounds like you may have a short in the S-Meter wiring.
>
> There are a couple of good service guys, WA8SAJ and WB4HFN are two of
> the best. They are backed up, but do good work. Course you don't
> learn anything that way!! :-)
>
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > While troubleshooting the low 10M sensitivity last evening I lost R53, R187 trimmer, R168 and R71. I thought I had it traced down, replaced the burnt resistors and inserted a newer trimmer as a test. Upon power up, I instantly burnt all of the afore mentioned resistors for the exception of the trimmer.
> >
> > Do you offer repair services on the TR4 line or recommend someone to completely go through this thing. I have wasted way too much time and continue to come up short. Its time

a professional take care of it for me.
> >
> > Thanks for your time,
> >
> > N9XTF
> >
> >
> > --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> >> Garey,
> >>
> >> Yes I verified the voltage early on, the 6BZ6 that was in there was very black from over voltage. I also verified that the leads were dressed properly and went to the correct locations. That's not to say that I didn't miss something though. I purchased a dozen 12BZ6 tubes and have tried several of them to make sure that I did not have a soft tube. They all act the same.
> >>
> >> I neautralized the PA and it is very close on all bands. It was quite difficult to do this time, compared to my other drakes though.
> >>
> >> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>> OK, I recall this one now. I typically have four or five of these
> >>> 'projects' going at a time, and sometimes they run together! :-)
> >>>
> >>> Did you verify that you have 12V on the 12BZ6??
> >>>
> >>> Your erratic tuning sounds like neutralization. This wouldn't affect
> >>> sensitivity on 10M though. Any time you have a stage or stages that
> >>> are 'jittery' or jump around when tune, it's a good bet that you have
> >>> a stability problem.
> >>>
> >>> It 'could' indicate a fixed capacitor breaking down, or a bad solder
> >>> joint. Mica caps with large DC voltagesappliedto them can sometimes
> >>> develop 'whiskers' that can short intermittently. And of course, bad
> >>> grounds, or poor lead dress can cause instability as well.
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> >>> slowcountry1 wrote:
> >>>> Garey,
> >>>>
> >>>> Yes, I have used the CD to attempt to trace everything that I have found modified and screwed up by the previous golden screw driver. I was unable to see this clearly enough on the CD's, its in a tight spot. I make a hand drawing and take pictures before I change anything to ensure that I place parts back where they came from however; this one was already in the wrong place so it went back wrong, oops!
> >>>>

> >>>> The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.
> >>>>
> >>>> The rig had a 6BZ6 at V-11 when I started. The rig calls for a 12BZ6 so that's the first thing I replaced. V-7 is a 12BA6 which I've swapped out a couple of times. The stage that I'm at is tolerable however; my idea was to dedicated this rig to 10/15M service, so this is why i'm concerned with sensitivity on 10M. My TR-4CW with the NB will be dedicated to the lower bands and my TR-6 for 6M.
> >>>>
> >>>> I have tried multiple harmonics of the calibrator signal; have not noticed anything any stronger from one to the other.
> >>>>
> >>>> Also, as suggested on my tuning complaint earlier in the series of messages, I DeOxit the Plate and loading caps and replaced the ball bearing grease. The plate and load caps are very smooth now and tuning is much smoother however; the plate cap still produces somewhat of a jumpy response in the tuning process. I have checked the grounds on the air variables as well. Is this possibly a coupling capacitor?
> >>>>
> >>>> I can not believe all of the foul connections and screwy modifications that I have run across on this one. I lost the filament voltage on two of the 6JB6s and the other 6volt tubes the other night. The filament voltage lead off the first PA tube was partially cut and I did not notice it and then it finally broke off. After I get the darn thing working 100%, I'm going to have to go back and re-dress / replace some coax, wire and such that have iron burns and such from previous owners to make it look halfway decent. Its such a great radio its a shame its had such a rough life.
> >>>>
> >>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>> Doug -
> >>>>>
> >>>>> Whoops! Those pesky connections insist on being made to the correct
> >>>>> pin..... :-) This is one of the places where the CD comes in very
> >>>>> handy. See my first message at the bottom of thisstring!
> >>>>>
> >>>>> I wouldn't worry about the Section G. problem. This methodof setting
> >>>>> the BAL MOD was written for the early TR-4 with 4 pole filters
> >>>>> (soupcan). The newer sixpole filters have sharper skirts, making the
> >>>>> CAR OSC signal too far down to overcome idle current. Later BAL MOD
> >>>>> adjustments need to be done with a scope or separate receiver and the
> >>>>> adjustments made to minimize the carrier feedthrough. You should be
> >>>>> able to null it almost to zero on the scope or well into the noise on
> >>>>> a separate receiver.
> >>>>>
> >>>>> Have you tried listening to a different harmonic of the CAL? The level
> >>>>> can vary quite a bit up there from harmonic to harmonic.
> >>>>>
> >>>>> I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at
> >>>>> V11? Also, sub V7.
> >>>>>
> >>>>> Yes, the audio preamp stage is a big help.
> >>>>>

> >>>>> Progress, you're getting there.....
> >>>>>
> >>>>> 73, Garey - K4OAH
> >>>>> Glen Allen, VA
> >>>>>
> >>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>> and TR-4/C Service Supplement CDs
> >>>>> <www.k4oah.com>
> >>>>>
> >>>>> slowcountry1 wrote:
> >>>>>> Garey,
> >>>>>>
> >>>>>> Here is an update on the TR-4 progress;
> >>>>>>
> >>>>>> Thanks to a local ham, KC9LAD, he checked rf at the different stages and everything seemed to be amplifying at the suspect tubes. After sitting a parts rig next to my TR-4, we found that a mica cap (don't remember which number it is) was placed on the wrong leg to T-9. After moving it to the correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We went back through all of the alignment and everything was pretty close. Section E, adjustment of Injection Couplers had to be done without the alignment load on 10M. When using the alignment load the S-meter has no deflection and cannot determine proper calibration. Any ideas here?
> >>>>>>
> >>>>>> Section G. Adjustment of Bal Modulator still does not produce and plate current above resting current.
> >>>>>>
> >>>>>> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
> >>>>>>
> >>>>>> Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.
> >>>>>>
> >>>>>> Thank you for your time,
> >>>>>>
> >>>>>> Doug N9XTF
> >>>>>>
> >>>>>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> >>>>>>> Garey,
> >>>>>>>
> >>>>>>> One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.

> >>>>>>>
> >>>>>>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
> >>>>>>>
> >>>>>>> RF tune peaks signals on all bands as I expect it should.
> >>>>>>>
> >>>>>>> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
> >>>>>>>
> >>>>>>> After repairing T7 and T9, section J alignment all peaks as I understand it should.
> >>>>>>>
> >>>>>>> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
> >>>>>>>
> >>>>>>> I have not been able to source an O-Scope yet.
> >>>>>>>
> >>>>>>> At this point, I'm pretty much stuck in the mud.
> >>>>>>>
> >>>>>>> Doug N9XTF
> >>>>>>>
> >>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>> Doug -
> >>>>>>>>
> >>>>>>>> Progress!
> >>>>>>>>
> >>>>>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
> >>>>>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
> >>>>>>>> RF TUNE peak as it should? If you can't get a meter reading, you
> >>>>>>>> should be ableto hear the signal on an external receiver andtune for
> >>>>>>>> loudest signal to verify tuning. Do all the adjustments in Section
> >>>>>>>> VIII, para J peak as they should? Again if you can't get plate
> >>>>>>>> current, tune for max signal in an external receiver.
> >>>>>>>>
> >>>>>>>> The problem(s) have to be in this area. Did you get access to a
> >>>>>>>> scope? Makes these types of problems much easier to track down. You
> >>>>>>>> can compare the input and output of various stages to see if you have
> >>>>>>>> gain or perhaps loss onone or more bands. And be sure the
> >>>>>>>> BANDoscillatoris running strong on the higher bands.
> >>>>>>>>
> >>>>>>>> 73, Garey - K4OAH
> >>>>>>>> Glen Allen, VA
> >>>>>>>>
> >>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>> <www.k4oah.com>
> >>>>>>>>

> >>>>>>>> slowcountry1 wrote:
> >>>>>>>>> Garey,
> >>>>>>>>>
> >>>>>>>>> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
> >>>>>>>>>
> >>>>>>>>> I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
> >>>>>>>>>
> >>>>>>>>> With the selector switch in Cal, the S-Meter produces readings on the following bands;
> >>>>>>>>>
> >>>>>>>>> 80M S9+30
> >>>>>>>>> 40M S9+10
> >>>>>>>>> 20M S7
> >>>>>>>>> 15M S1
> >>>>>>>>> 10M no S reading change.
> >>>>>>>>>
> >>>>>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
> >>>>>>>>>
> >>>>>>>>> I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
> >>>>>>>>>
> >>>>>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
> >>>>>>>>>
> >>>>>>>>> Thanks for all of your help,
> >>>>>>>>>
> >>>>>>>>> Doug N9XTF
> >>>>>>>>>
> >>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>>> Doug -
> >>>>>>>>>>
> >>>>>>>>>> It is not unusual for there to be caps and resistors inside
> >>>>>>>>>> transformers. I suppose if it's not marked it may be a bypass or no
> >>>>>>>>>> telling. I suspect what has happened is that someone tried to move it
> >>>>>>>>>> to CB and failed, and then either that person or someone else has
> >>>>>>>>>> tried to return it to stock.
> >>>>>>>>>>
> >>>>>>>>>> You can certainly mount the cap on the terminals on the outside of the
> >>>>>>>>>> transformer. There may be some coupling problems, but I doubt it.
> >>>>>>>>>> Certainly worth trying until you find the right one. Sometimes these
> >>>>>>>>>> caps are selected to account for variations in coil windings, plus
> >>>>>>>>>> ferrites were not nearly as consistent from batch to batch as they are

> >>>>>>>>>> today. Once you find a suitable value, I'd move it inside the can
> >>>>>>>>>> just to be safe. Be sure and use stable capacitors such as silver
> >>>>>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> >>>>>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
> >>>>>>>>>> cap it would give you a starting point.
> >>>>>>>>>>
> >>>>>>>>>> It's certainly possible that a model had a different layout, although
> >>>>>>>>>> I've not seen any significant variations. If you look in the
> >>>>>>>>>> 'Versions' directory, there are a couple of Drake photos of different
> >>>>>>>>>> models that may help determine if something is abnormal.
> >>>>>>>>>>
> >>>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>>> Glen Allen, VA
> >>>>>>>>>>
> >>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> >>>>>>>>>> <www.k4oah.com>
> >>>>>>>>>>
> >>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>> Garey,
> >>>>>>>>>>>
> >>>>>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
> >>>>>>>>>>>
> >>>>>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> >>>>>>>>>>>
> >>>>>>>>>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
> >>>>>>>>>>>
> >>>>>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> >>>>>>>>>>>
> >>>>>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> >>>>>>>>>>>
> >>>>>>>>>>> Regards,
> >>>>>>>>>>>
> >>>>>>>>>>> Doug N9XTF
> >>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>>>>> Doug -
> >>>>>>>>>>>>
> >>>>>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
> >>>>>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is

> >>>>>>>>>>>> critical. This is the best way to make sure everything is back where
> >>>>>>>>>>>> it should be!
> >>>>>>>>>>>>
> >>>>>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>>>>> Glen Allen, VA
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> >>>>>>>>>>>> <www.k4oah.com>
> >>>>>>>>>>>>
> >>>>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>>>> Garey,
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
> >>>>>>>>>>>>>
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
> >
>

13542. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-04 14:13:56 UTC
From: Garey Barrell
Topic: 13108 Message: 13542

Doug -

Hmmmm... I wouldn't expect T-14 to have any band-related
difficulties. It's the same on all bands. T-14 is sometimes opened
to replace the diodes, and in a few cases I haveseen the diode lead(s)
short to the can, making it impossible to null the carrier.

Only 10M problems, and judging from the other things you have found,
I'm convinced someone butchered up this radio in an attempt to put it
on 27 MHz. Obviously that someone knew just enough to be dangerous.

You can see pretty much everything around T-14 on the CD. You can
blow up the pix at least 600x on screen, and that area is pretty
accessible. This area was essentially the same in all versions, since
there were no real changes all the way back to the TR-4.

The only other thing I could think of on the S-Meter circuit smoke
would be a shorted tube or something else on the Plate or Screen lines
of the AVC controlled tubes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Ok, I'm back at it. Going back over the rig I have discovered T-14 has been modified, or at least it has been opened, and the associated wiring around it has been modified. I have compared it to a couple TR-4Cw parts rigs and the wiring in this area is quite different. I cannot find a picture on the internet, showing the area, with a serial number close to mine to verify that this was not the original configuration. Is there anything in this area that would effect 10 and 15M receive?
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> I went through the S-Meter chain and was unable to find a short. I disconnected the meters, made sure the wiring was not shorted where they exit the mounting plate etc. I did not find any source for the problem however; I replaced R-71 with a flameproof 500 ohm 1/2 watt resistor and all seems to be fine in this area and now have the receiver working again. I have no clue here.
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> Regards,
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> Doug N9XTF
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>> Sounds like you may have a short in the S-Meter wiring.
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>> There are a couple of good service guys, WA8SAJ and WB4HFN are two of
>> the best. They are backed up, but do good work. Course you don't
>> learn anything that way!! :-)
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>>>
>>> Do you offer repair services on the TR4 line or recommend someone to completely go through this thing. I have wasted way too much time and continue to come up short. Its time a professional take care of it for me.
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>>> Thanks for your time,
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>>> N9XTF
>>>
>>>
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>>>>>>>
>>>>>>> Yes, the audio preamp stage is a big help.
>>>>>>>
>>>>>>> Progress, you're getting there.....
>>>>>>>
>>>>>>> 73, Garey - K4OAH
>>>>>>> Glen Allen, VA
>>>>>>>
>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>> <www.k4oah.com>
>>>>>>>
>>>>>>> slowcountry1 wrote:
>>>>>>>> Garey,
>>>>>>>>
>>>>>>>> Here is an update on the TR-4 progress;
>>>>>>>>
>>>>>>>> Thanks to a local ham, KC9LAD, he checked rf at the different stages and everything seemed to be amplifying at the suspect tubes. After sitting a parts rig next to my TR-4, we found that a mica cap (don't remember which number it is) was placed on the wrong leg to T-9. After moving it to the correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We went back through all of the alignment and everything was pretty close. Section E, adjustment of Injection Couplers had to be done without the alignment load on 10M. When using the alignment load the S-meter has no deflection and cannot determine proper calibration. Any ideas here?
>>>>>>>>
>>>>>>>> Section G. Adjustment of Bal Modulator still does not produce and plate current

above resting current.
>>>>>>>>
>>>>>>>> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
>>>>>>>>
>>>>>>>> Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.
>>>>>>>>
>>>>>>>> Thank you for your time,
>>>>>>>>
>>>>>>>> Doug N9XTF
>>>>>>>>
>>>>>>>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
>>>>>>>>> Garey,
>>>>>>>>>
>>>>>>>>> One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex 6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.
>>>>>>>>>
>>>>>>>>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
>>>>>>>>>
>>>>>>>>> RF tune peaks signals on all bands as I expect it should.
>>>>>>>>>
>>>>>>>>> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
>>>>>>>>>
>>>>>>>>> After repairing T7 and T9, section J alignment all peaks as I understand it should.
>>>>>>>>>
>>>>>>>>> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
>>>>>>>>>
>>>>>>>>> I have not been able to source an O-Scope yet.
>>>>>>>>>
>>>>>>>>> At this point, I'm pretty much stuck in the mud.
>>>>>>>>>
>>>>>>>>> Doug N9XTF
>>>>>>>>>
>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:

>>>>>>>>>> Doug -
>>>>>>>>>>
>>>>>>>>>> Progress!
>>>>>>>>>>
>>>>>>>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
>>>>>>>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
>>>>>>>>>> RF TUNE peak as it should? If you can't get a meter reading, you
>>>>>>>>>> should be ableto hear the signal on an external receiver andtune for
>>>>>>>>>> loudest signal to verify tuning. Do all the adjustments in Section
>>>>>>>>>> VIII, para J peak as they should? Again if you can't get plate
>>>>>>>>>> current, tune for max signal in an external receiver.
>>>>>>>>>>
>>>>>>>>>> The problem(s) have to be in this area. Did you get access to a
>>>>>>>>>> scope? Makes these types of problems much easier to track down. You
>>>>>>>>>> can compare the input and output of various stages to see if you have
>>>>>>>>>> gain or perhaps loss onone or more bands. And be sure the
>>>>>>>>>> BANDoscillatoris running strong on the higher bands.
>>>>>>>>>>
>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>
>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>> <www.k4oah.com>
>>>>>>>>>>
>>>>>>>>>> slowcountry1 wrote:
>>>>>>>>>>> Garey,
>>>>>>>>>>>
>>>>>>>>>>> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
>>>>>>>>>>>
>>>>>>>>>>> I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
>>>>>>>>>>>
>>>>>>>>>>> With the selector switch in Cal, the S-Meter produces readings on the following bands;
>>>>>>>>>>>
>>>>>>>>>>> 80M S9+30
>>>>>>>>>>> 40M S9+10
>>>>>>>>>>> 20M S7
>>>>>>>>>>> 15M S1
>>>>>>>>>>> 10M no S reading change.
>>>>>>>>>>>
>>>>>>>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
>>>>>>>>>>>
>>>>>>>>>>> I went back through the rig and again loosened and tightened every screw, have

done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
>>>>>>>>>>>
>>>>>>>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
>>>>>>>>>>>
>>>>>>>>>>> Thanks for all of your help,
>>>>>>>>>>>
>>>>>>>>>>> Doug N9XTF
>>>>>>>>>>>
>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>>>> Doug -
>>>>>>>>>>>
>>>>>>>>>>> It is not unusual for there to be caps and resistors inside
>>>>>>>>>>> transformers. I suppose if it's not marked it may be a bypass or no
>>>>>>>>>>> telling. I suspect what has happened is that someone tried to move it
>>>>>>>>>>> to CB and failed, and then either that person or someone else has
>>>>>>>>>>> tried to return it to stock.
>>>>>>>>>>>
>>>>>>>>>>> You can certainly mount the cap on the terminals on the outside of the
>>>>>>>>>>> transformer. There may be some coupling problems, but I doubt it.
>>>>>>>>>>> Certainly worth trying until you find the right one. Sometimes these
>>>>>>>>>>> caps are selected to account for variations in coil windings, plus
>>>>>>>>>>> ferrites were not nearly as consistent from batch to batch as they are
>>>>>>>>>>> today. Once you find a suitable value, I'd move it inside the can
>>>>>>>>>>> just to be safe. Be sure and use stable capacitors such as silver
>>>>>>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
>>>>>>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
>>>>>>>>>>> cap it would give you a starting point.
>>>>>>>>>>>
>>>>>>>>>>> It's certainly possible that a model had a different layout, although
>>>>>>>>>>> I've not seen any significant variations. If you look in the
>>>>>>>>>>> 'Versions' directory, there are a couple of Drake photos of different
>>>>>>>>>>> models that may help determine if something is abnormal.
>>>>>>>>>>>
>>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>>
>>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>>> <www.k4oah.com>
>>>>>>>>>>>
>>>>>>>>>>> slowcountry1 wrote:
>>>>>>>>>>>> Garey,
>>>>>>>>>>>>
>>>>>>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
>>>>>>>>>>>>
>>>>>>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it

is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
>>>>>>>>>>>>>
>>>>>>>>>>>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
>>>>>>>>>>>>>
>>>>>>>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
>>>>>>>>>>>>>
>>>>>>>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
>>>>>>>>>>>>>
>>>>>>>>>>>>> Regards,
>>>>>>>>>>>>>
>>>>>>>>>>>>> Doug N9XTF
>>>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>>>>>>>> Doug -
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
>>>>>>>>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
>>>>>>>>>>>>>>> critical. This is the best way to make sure everything is back where
>>>>>>>>>>>>>>> it should be!
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>>>>>>> <www.k4oah.com>
>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>> slowcountry1 wrote:
>>>>>>>>>>>>>>>>> Garey,
>>>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
>>>>>>>>>>>>>>>>>
>>>
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>>> ------------------------------------
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>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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13543. Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 03:05:53 UTC
From: Patrick Ross
Topic: 13543 Message: 13543

I recently acquired a Drake L4B complete with matching Power Supply fitted with the Harbach board mod.

My question is, what is the acceptable "normal" temperature for the Power Supply under operating conditions - say full output on SSB for about 10 minutes?

I find that the case on the Power Supply HV transformer gets very warm, notwithstanding that it out in the open and in a well ventilated area. I am concerned about overheating due to lack of fan/integral cooling system.

Interested in your experience.

Tnx, Patrick
VE3CNX

[Non-text portions of this message have been removed]

13544. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 13:38:14 UTC
From: Garey Barrell
Topic: 13543 Message: 13544

Patrick -

You can never have too much air on tube gear, unless it blows the tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK), who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply, blowing UP!. It doesn't have to be a turbine, just enough (silent) to 'encourage' that hot air to keep on rising, and get it away from the area. I also put a fan on top of the L-4B,right over the tubes, same type, blowing up, for the same reason. The PS and the amp right over the tubeswill get too hot to comfortably hold your hand on. With the fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't youuse them?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm, notwithstanding that it out in the open and in a well ventilated area. I am concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX
>

13545. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 14:02:38 UTC
From: Patrick Ross
Topic: 13543 Message: 13545

Hi Gary:
Thank you for the prompt and informative response. I appreciate that.

I have done more research and testing with an infrared temperature sensor/readout and have determined that the source of the heat is the two (2) 50K 50W resistors which are inline when the amp is in the SSB mode (2500V).
The resistors get very hot (120 degrees C) even when the amp is in standby mode and the SSB switch is "on".
The transformer plates themselves are much cooler - about 30 C.

So, I will go through my junk box and install a fan or two on the PS just for insurance.

73, and tnx agn. Hope to meet you on the air.

Pat, VE3CNX

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 5, 2013 9:38:14 AM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Patrick -

You can never have too much air on tube gear, unless it blows the tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK), who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply, blowing UP!. It doesn't have to be a turbine, just enough (silent) to 'encourage' that hot air to keep on rising, and get it away from the area. I also put a fan on top of the L-4B,right over the tubes, same type, blowing up, for the same reason. The PS and the amp right over the tubeswill get too hot to comfortably hold your hand on. With the fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't youuse them?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm, notwithstanding that it out in the open and in a well ventilated area. I am concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX
>

[Non-text portions of this message have been removed]

13546. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 16:51:53 UTC
From: slowcountry1
Topic: 13108 Message: 13546

Garey,

This is where I am currently;

Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.

Yesterday, I changed out T-1. I have now replaced all of the cans that relate to 10 meters. This did not make any change on the S-Meter during alignment. I aligned the rig as best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.

Here are the problems that I have found;

1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.

2. For the first time, I transmitted on the air yesterday. I transmitted on all bands, 80 - 10 and received good audio reports. I noticed that the S-Meter does not kick upscale with voice peaks as it does on my TR-4Cw to indicate AGC activity. I swapped out the 12AX7 but no change.

3. I have an underlying and highly annoying what appears to be an AC hum from the speaker. I have no clue where the source of this is. I tried the headphone jack and have it there as well.

4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested, split in two and spread apart. I pulled the slug tuned L6 and L7 from my parts rig and installed them. I tuned them per the TR-4C manual however; I was only able to obtain 40 watt on transmit. I then hand wound a new L7 and installed it. I was only able to obtain 65 watts on transmit. I then reinstalled the molested one and transmit at an even 100 watts. Is this coil actually supposed to be split and separated? I've changed out just about every thing adjustable in this chain.

Transmit into a dummy load produces;

28.8 110Watts
28.4 130watts
21.35 100watts
14.3 140watts
7.3 195watts
3.8 200watts

The unit is neutralized on 10M and all bands appear to produce max power at plate dip.

The calibration signal does not appear to produce the signal strength that It should on 10M and 15M but it appears that when hooked to an antenna the rig receives as good or a tad better than my TR-4Cw does. I do not know how the AGC is supposed to work but it seems to me that there might be something wrong with the AGC on transmit and receive?

It would be nice if the S-meter functioned as it should but If it cannot be fixed I can live without it. I have a feeling it points to other problems though. The background hum, while my brain tunes it out after an hour or so, really needs to go. Remember that I installed the TR-4 audio board out of my parts rig. This hum was not present, to the best of my recollection until the S-Meter related resistors burnt. All grounds have been checked and double checked as well as the chassis screws.

I am going to upload a couple of pictures of the R-76 area if you want to look at them.

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Hmmmm... I wouldn't expect T-14 to have any band-related
> difficulties. It's the same on all bands. T-14 is sometimes opened
> to replace the diodes, and in a few cases I haveseen the diode lead(s)
> short to the can, making it impossible to null the carrier.
>
> Only 10M problems, and judging from the other things you have found,
> I'm convinced someone butchered up this radio in an attempt to put it
> on 27 MHz. Obviously that someone knew just enough to be dangerous.
>
> You can see pretty much everything around T-14 on the CD. You can
> blow up the pix at least 600x on screen, and that area is pretty
> accessible. This area was essentially the same in all versions, since
> there were no real changes all the way back to the TR-4.
>
> The only other thing I could think of on the S-Meter circuit smoke
> would be a shorted tube or something else on the Plate or Screen lines
> of the AVC controlled tubes.
>
> 73, Garey - K4OAH
> Glen Allen, VA

>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > Ok, I'm back at it. Going back over the rig I have discovered T-14 has been modified, or at least it has been opened, and the associated wiring around it has been modified. I have compared it to a couple TR-4Cw parts rigs and the wiring in this area is quite different. I cannot find a picture on the internet, showing the area, with a serial number close to mine to verify that this was not the original configuration. Is there anything in this area that would effect 10 and 15M receive?
> >
> > I went through the S-Meter chain and was unable to find a short. I disconnected the meters, made sure the wiring was not shorted where they exit the mounting plate etc. I did not find any source for the problem however; I replaced R-71 with a flameproof 500 ohm 1/2 watt resistor and all seems to be fine in this area and now have the receiver working again. I have no clue here.
> >
> > Regards,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>
> >> Sounds like you may have a short in the S-Meter wiring.
> >>
> >> There are a couple of good service guys, WA8SAJ and WB4HFN are two of
> >> the best. They are backed up, but do good work. Course you don't
> >> learn anything that way!! :-)
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> While troubleshooting the low 10M sensitivity last evening I lost R53, R187 trimmer, R168 and R71. I thought I had it traced down, replaced the burnt resistors and inserted a newer trimmer as a test. Upon power up, I instantly burnt all of the afore mentioned resistors for the exception of the trimmer.
> >>>
> >>> Do you offer repair services on the TR4 line or recommend someone to completely go

through this thing. I have wasted way too much time and continue to come up short. Its time a professional take care of it for me.
> >>>
> >>> Thanks for your time,
> >>>
> >>> N9XTF
> >>>
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> >>>> Garey,
> >>>>
> >>>> Yes I verified the voltage early on, the 6BZ6 that was in there was very black from over voltage. I also verified that the leads were dressed properly and went to the correct locations. That's not to say that I didn't miss something though. I purchased a dozen 12BZ6 tubes and have tried several of them to make sure that I did not have a soft tube. They all act the same.
> >>>>
> >>>> I neautralized the PA and it is very close on all bands. It was quite difficult to do this time, compared to my other drakes though.
> >>>>
> >>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>> OK, I recall this one now. I typically have four or five of these
> >>>>> 'projects' going at a time, and sometimes they run together! :-)
> >>>>>
> >>>>> Did you verify that you have 12V on the 12BZ6??
> >>>>>
> >>>>> Your erratic tuning sounds like neutralization. This wouldn't affect
> >>>>> sensitivity on 10M though. Any time you have a stage or stages that
> >>>>> are 'jittery' or jump around when tune, it's a good bet that you have
> >>>>> a stability problem.
> >>>>>
> >>>>> It 'could' indicate a fixed capacitor breaking down, or a bad solder
> >>>>> joint. Mica caps with large DC voltagesappliedto them can sometimes
> >>>>> develop 'whiskers' that can short intermittently. And of course, bad
> >>>>> grounds, or poor lead dress can cause instability as well.
> >>>>>
> >>>>> 73, Garey - K4OAH
> >>>>> Glen Allen, VA
> >>>>>
> >>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>> and TR-4/C Service Supplement CDs
> >>>>> <www.k4oah.com>
> >>>>>
> >>>>> slowcountry1 wrote:
> >>>>>> Garey,
> >>>>>>
> >>>>>> Yes, I have used the CD to attempt to trace everything that I have found modified and screwed up by the previous golden screw driver. I was unable to see this clearly enough on the CD's, its in a tight spot. I make a hand drawing and take pictures before I change anything to ensure that I place parts back where they came from however; this one was already in the wrong place so it went back wrong, oops!

> >>>>>>
> >>>>>> The serial number is 26095, from what I can tell, it more resembles a TR-3 than the pictures of the TR-4.
> >>>>>>
> >>>>>> The rig had a 6BZ6 at V-11 when I started. The rig calls for a 12BZ6 so that's the first thing I replaced. V-7 is a 12BA6 which I've swapped out a couple of times. The stage that I'm at is tolerable however; my idea was to dedicated this rig to 10/15M service, so this is why i'm concerned with sensitivity on 10M. My TR-4CW with the NB will be dedicated to the lower bands and my TR-6 for 6M.
> >>>>>>
> >>>>>> I have tried multiple harmonics of the calibrator signal; have not noticed anything any stronger from one to the other.
> >>>>>>
> >>>>>> Also, as suggested on my tuning complaint earlier in the series of messages, I DeOxit the Plate and loading caps and replaced the ball bearing grease. The plate and load caps are very smooth now and tuning is much smoother however; the plate cap still produces somewhat of a jumpy response in the tuning process. I have checked the grounds on the air variables as well. Is this possibly a coupling capacitor?
> >>>>>>
> >>>>>> I can not believe all of the foul connections and screwy modifications that I have run across on this one. I lost the filament voltage on two of the 6JB6s and the other 6volt tubes the other night. The filament voltage lead off the first PA tube was partially cut and I did not notice it and then it finally broke off. After I get the darn thing working 100%, I'm going to have to go back and re-dress / replace some coax, wire and such that have iron burns and such from previous owners to make it look halfway decent. Its such a great radio its a shame its had such a rough life.
> >>>>>>
> >>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>> Doug -
> >>>>>>>
> >>>>>>> Whoops! Those pesky connections insist on being made to the correct
> >>>>>>> pin..... :-) This is one of the places where the CD comes in very
> >>>>>>> handy. See my first message at the bottom of thisstring!
> >>>>>>>
> >>>>>>> I wouldn't worry about the Section G. problem. This methodof setting
> >>>>>>> the BAL MOD was written for the early TR-4 with 4 pole filters
> >>>>>>> (soupcan). The newer sixpole filters have sharper skirts, making the
> >>>>>>> CAR OSC signal too far down to overcome idle current. Later BAL MOD
> >>>>>>> adjustments need to be done with a scope or separate receiver and the
> >>>>>>> adjustments made to minimize the carrier feedthrough. You should be
> >>>>>>> able to null it almost to zero on the scope or well into the noise on
> >>>>>>> a separate receiver.
> >>>>>>>
> >>>>>>> Have you tried listening to a different harmonic of the CAL? The level
> >>>>>>> can vary quite a bit up there from harmonic to harmonic.
> >>>>>>>
> >>>>>>> I don't see your s/n here. Do you have a 12BA6, a 12BZ6 or a 6BZ6 at
> >>>>>>> V11? Also, sub V7.
> >>>>>>>
> >>>>>>> Yes, the audio preamp stage is a big help.

> >>>>>>>
> >>>>>>> Progress, you're getting there.....
> >>>>>>>
> >>>>>>> 73, Garey - K4OAH
> >>>>>>> Glen Allen, VA
> >>>>>>>
> >>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>> <www.k4oah.com>
> >>>>>>>
> >>>>>>> slowcountry1 wrote:
> >>>>>>>> Garey,
> >>>>>>>>
> >>>>>>>> Here is an update on the TR-4 progress;
> >>>>>>>>
> >>>>>>>> Thanks to a local ham, KC9LAD, he checked rf at the different stages and everything seemed to be amplifying at the suspect tubes. After sitting a parts rig next to my TR-4, we found that a mica cap (don't remember which number it is) was placed on the wrong leg to T-9. After moving it to the correct leg, on cal 15M produces S-9 and 10M now produces about S-4. We went back through all of the alignment and everything was pretty close. Section E, adjustment of Injection Couplers had to be done without the alignment load on 10M. When using the alignment load the S-meter has no deflection and cannot determine proper calibration. Any ideas here?
> >>>>>>>>
> >>>>>>>> Section G. Adjustment of Bal Modulator still does not produce and plate current above resting current.
> >>>>>>>>
> >>>>>>>> All bands appear to have the appropriate sensitivity except for 10M. As stated in Cal mode it will produce an S-3 or S-4 reading. My TR-4CW with produce S-7. Is this just normal behavior for the TR-4 or am I still off somewhere?
> >>>>>>>>
> >>>>>>>> Growing extremely tired of the low audio from the TR-4, I removed the TR-4 audio board from a TR-4Cw parts rig and installed it in the TR-4. I now have output audio consistent with my TR-4Cw. This was quite a chore obtaining sufficient lead lengths on a number of the cables.
> >>>>>>>>
> >>>>>>>> Thank you for your time,
> >>>>>>>>
> >>>>>>>> Doug N9XTF
> >>>>>>>>
> >>>>>>>> --- In DrakeRadio@yahoogroups.com, "slowcountry1" <dcoffman@> wrote:
> >>>>>>>>> Garey,
> >>>>>>>>>
> >>>>>>>>> One of the first things I did was check the band oscillator. All of the voltages to TP were positive so I adjusted L1, L2 and L5; I was able to bring them down but only close to zero, could not obtain a negative voltage. I swapped out V1 with a used tube and got 40M to -.39VDC 15M to -.43VDC and 10M to -.42VDC. I did not have a new tube so today I replaced V1 with a new Amperex 6U8A tube that I had (I tried the tube from V3 it wasn't any better). I was then able to get 40M to -1.512VDC 15M to -1.482VDC and 10M to -1.34VDC. For smiles and grins, I replaced V3, assuming it was soft, with a new Amperex

6U8A tube. I have a bunch of these from a sale somewhere but I didn't have any 6EA8 new replacements.
> >>>>>>>>>
> >>>>>>>>> One point of note, when I have the switch in Cal, the tone produced from the speaker changes significantly if I touch or have my finger near the V1 tube.
> >>>>>>>>>
> >>>>>>>>> RF tune peaks signals on all bands as I expect it should.
> >>>>>>>>>
> >>>>>>>>> In calibrate mode, where should I put a wire coil to listen for 10M and 15M on a separate receiver? In section E, I tuned T-2 and T-1 for loudest tone out of the TR-4 speaker.
> >>>>>>>>>
> >>>>>>>>> After repairing T7 and T9, section J alignment all peaks as I understand it should.
> >>>>>>>>>
> >>>>>>>>> I went through and touched up a few solder joints that looked suspicious but have been unable to find or fix any other problems. 15M and 10M receive still appear very very weak. (Volume all the way up and strong signals very hard to hear with no S-meter deflection.)
> >>>>>>>>>
> >>>>>>>>> I have not been able to source an O-Scope yet.
> >>>>>>>>>
> >>>>>>>>> At this point, I'm pretty much stuck in the mud.
> >>>>>>>>>
> >>>>>>>>> Doug N9XTF
> >>>>>>>>>
> >>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>>> Doug -
> >>>>>>>>>>
> >>>>>>>>>> Progress!
> >>>>>>>>>>
> >>>>>>>>>> Have you checked the BAND oscillator? Swap V1. Do you get a strong
> >>>>>>>>>> negative voltage on TP? Does it peak with L1 or L2 as expected? Does
> >>>>>>>>>> RF TUNE peak as it should? If you can't get a meter reading, you
> >>>>>>>>>> should be ableto hear the signal on an external receiver andtune for
> >>>>>>>>>> loudest signal to verify tuning. Do all the adjustments in Section
> >>>>>>>>>> VIII, para J peak as they should? Again if you can't get plate
> >>>>>>>>>> current, tune for max signal in an external receiver.
> >>>>>>>>>>
> >>>>>>>>>> The problem(s) have to be in this area. Did you get access to a
> >>>>>>>>>> scope? Makes these types of problems much easier to track down. You
> >>>>>>>>>> can compare the input and output of various stages to see if you have
> >>>>>>>>>> gain or perhaps loss onone or more bands. And be sure the
> >>>>>>>>>> BANDoscillatoris running strong on the higher bands.
> >>>>>>>>>>
> >>>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>>> Glen Allen, VA
> >>>>>>>>>>
> >>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>>> <www.k4oah.com>

> >>>>>>>>>>
> >>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>> Garey,
> >>>>>>>>>>
> >>>>>>>>>>> Ok, T9 had a 53pF cap inside. I changed it to 41pF and now the can tunes correctly. I went back through and the adjustment of the mixer and RF coils and peaked all of them.
> >>>>>>>>>>
> >>>>>>>>>>> I removed the plate and screen leads and used the load as directed to adjust the injection couplers. I cannot get an S-Meter reading on either 15M or 10M while doing this. 15 and 10 are very quit on receive, volume has to be all the way up and strong signals are still faint.
> >>>>>>>>>>
> >>>>>>>>>>> With the selector switch in Cal, the S-Meter produces readings on the following bands;
> >>>>>>>>>>
> >>>>>>>>>>> 80M S9+30
> >>>>>>>>>>> 40M S9+10
> >>>>>>>>>>> 20M S7
> >>>>>>>>>>> 15M S1
> >>>>>>>>>>> 10M no S reading change.
> >>>>>>>>>>
> >>>>>>>>>>> The receiver appears to work good on 80, 40 and pretty well on 20. !5 and 10 seem dead.
> >>>>>>>>>>
> >>>>>>>>>>> I went back through the rig and again loosened and tightened every screw, have done this several times. I have looked at T1, T2 and T3 and it does not appear that these have been touched. I have looked through the rig and don't see any modifications other than the ones that I have fixed.
> >>>>>>>>>>
> >>>>>>>>>>> Several weeks ago, I cleaned all of the band switches. Do you have a direction to point me in to look for the deficiency on 10 and 15M?
> >>>>>>>>>>
> >>>>>>>>>>> Thanks for all of your help,
> >>>>>>>>>>
> >>>>>>>>>>> Doug N9XTF
> >>>>>>>>>>
> >>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>>>>> Doug -
> >>>>>>>>>>>
> >>>>>>>>>>>> It is not unusual for there to be caps and resistors inside
> >>>>>>>>>>>> transformers. I suppose if it's not marked it may be a bypass or no
> >>>>>>>>>>>> telling. I suspect what has happened is that someone tried to move it
> >>>>>>>>>>>> to CB and failed, and then either that person or someone else has
> >>>>>>>>>>>> tried to return it to stock.
> >>>>>>>>>>>
> >>>>>>>>>>>> You can certainly mount the cap on the terminals on the outside of the
> >>>>>>>>>>>> transformer. There may be some coupling problems, but I doubt it.
> >>>>>>>>>>>> Certainly worth trying until you find the right one. Sometimes these
> >>>>>>>>>>>> caps are selected to account for variations in coil windings, plus

> >>>>>>>>>>>> ferrites were not nearly as consistent from batch to batch as they are
> >>>>>>>>>>>> today. Once you find a suitable value, I'd move it inside the can
> >>>>>>>>>>>> just to be safe. Be sure and use stable capacitors such as silver
> >>>>>>>>>>>> mica or NP0 ceramic types. I wouldn't expect it to be morethan 10's
> >>>>>>>>>>>> of pFs, but I could be wrong. If you are able to measure the existing
> >>>>>>>>>>>> cap it would give you a starting point.
> >>>>>>>>>>>>
> >>>>>>>>>>>> It's certainly possible that a model had a different layout, although
> >>>>>>>>>>>> I've not seen any significant variations. If you look in the
> >>>>>>>>>>>> 'Versions' directory, there are a couple of Drake photos of different
> >>>>>>>>>>>> models that may help determine if something is abnormal.
> >>>>>>>>>>>>
> >>>>>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>>>>> Glen Allen, VA
> >>>>>>>>>>>>
> >>>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>>>>> <www.k4oah.com>
> >>>>>>>>>>>>
> >>>>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>>>> Garey,
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> I've noticed that there are several things different between the picture on the CD and the rig. Were there some differences between the rig serial numbers that would explain that? I know there are some slight differences in the schematics.
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> On the 26000 schematic, I do not see a capacitor that would indicate that it is inside T-9. Is this typical? I looked at the cap but it did not have a value on it, it is a ceramic disc type. I can check it with my meter. I'm really getting tired of removing and installing this can, its in a really tight place for soldering and unsoldering, LOL.
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> I was thinking of installing it external to the can to facilitate trying different values. I imagine that this will effect tuning if I do so, what are your thoughts here?
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> It had crossed my mind that some magic screwdriver may have used this on 11M, but the crystals in it are all for 10M. This is not to say someone did not try to restore it to operation.
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> In addition,It was stored in less that ideal conditions; moisture and some other junk were allowed in the radio. Whomever worked on it did not understand mechanical or basic soldering techniques either.
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> Regards,
> >>>>>>>>>>>>>
> >>>>>>>>>>>>> Doug N9XTF
> >>>>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>>>>>> Doug -
> >>>>>>>>>>>>>

> >>>>>>>>>>>>>> One other thing. Compare your repaired areas with the photos inthe
> >>>>>>>>>>>>>> CD. Some of the wiring, especially in the PA and CO area is
> >>>>>>>>>>>>>> critical. This is the best way to make sure everything is back where
> >>>>>>>>>>>>>> it should be!
> >>>>>>>>>>>>>>
> >>>>>>>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>>>>>>> Glen Allen, VA
> >>>>>>>>>>>>>>
> >>>>>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>>>>>>> <www.k4oah.com>
> >>>>>>>>>>>>>>
> >>>>>>>>>>>>>> slowcountry1 wrote:
> >>>>>>>>>>>>>>> Garey,
> >>>>>>>>>>>>>>>
> >>>>>>>>>>>>>>> Here is the work that I have done this week and their results. I have a number of questions that will be included in the text.
> >>>>>>>>>>>>>>>
> >>>
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> >>> Yahoo! Groups Links
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13547. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 18:00:50 UTC
From: Abqcooks@...
Topic: 13543 Message: 13547

For cooling fans on the top of the L4B itself I found what I think are ideal.
Google the Antec True Quiet 120
They are just the right size to sit over each of the 3-500s and are in fact super quiet. There's a dip switch to set for either 600 rpm or 1000 rpm. The 600 rpm setting moves plenty of air up out of the cabinet and makes almost zero noise. They have them at Amazon and Best Buy for 11 dollars....Staples for 15 dollars. Small price for what they do so quietly.
For the power supply I also found the cabinet to get pretty hot to the touch and so did like
Garey suggests with small nearly silent fans. The cabinet now stays cool to the touch. I power the fans with walworts plugged into the power strip that I use as a power switch to turn on the T4XC. Anyway, try the Antec fans....you wont even know they are on.
73 Jim

-----Original Message-----
From: Patrick Ross <plrconsult@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, May 5, 2013 8:02 am
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Hi Gary:
Thank you for the prompt and informative response. I appreciate that.

I have done more research and testing with an infrared temperature sensor/readout and have determined that the source of the heat is the two (2) 50K 50W resistors which are inline when the amp is in the SSB mode (2500V). The resistors get very hot (120 degrees C) even when the amp is in standby mode and the SSB switch is "on".
The transformer plates themselves are much cooler - about 30 C.

So, I will go through my junk box and install a fan or two on the PS just for insurance.

73, and tnx agn. Hope to meet you on the air.

Pat, VE3CNX

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 5, 2013 9:38:14 AM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Patrick -

You can never have too much air on tube gear, unless it blows the tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK),

who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply,
blowing UP!. It doesn't have to be a turbine, just enough (silent) to
'encourage' that hot air to keep on rising, and get it away from the
area. I also put a fan on top of the L-4B,right over the tubes, same
type, blowing up, for the same reason. The PS and the amp right over
the tubeswill get too hot to comfortably hold your hand on. With the
fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are
cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't
youuse them?

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted
with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power
Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm,
notwithstanding that it out in the open and in a well ventilated area. I am
concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX
>

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Yahoo! Groups Links

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13548. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 18:00:54 UTC
From: Garey Barrell
Topic: 13108 Message: 13548

slowcountry1 wrote:
> Garey,
>
> This is where I am currently;
>
> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.

I have no idea what someone was doing messing around in this area. The basic circuit and arrangement haven't changed since the first TR-4, and perhaps even the TR-3! :-)

>
> Yesterday, I changed out T-1. I have now replaced all of the cans that relate to 10 meters. This did not make any change on the S-Meter during alignment. I aligned the rig as best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.
>
> Here are the problems that I have found;
>
> 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.

Make sure R163 is 100 ohms, may have increased due to overloading.
Make sure R62 is 33k ohms.

2. For the first time, I transmitted on the air yesterday. I transmitted on all bands, 80 - 10 and received good audio reports. I noticed that the S-Meter does not kick upscale with voice peaks as it does on my TR-4Cw to indicate AGC activity. I swapped out the 12AX7 but no change.

May be related to the slow response of the S-Meter, i.e., the just can't respond fast enough to show.

3. I have an underlying and highly annoying what appears to be an AC hum from the speaker. I have no clue where the source of this is. I tried the headphone jack and have it there as well.

Recheck wiring and grounding of the preamp stage. Sounds like you may have a ground loop.

4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested, split in two and spread apart. I pulled the slug tuned L6 and L7 from my parts rig and installed them. I tuned them per the TR-4C manual however; I was only able to obtain 40 watt on transmit. I then hand wound a new L7 and installed it. I was only able to obtain 65 watts on transmit. I then reinstalled the molested one and transmit at an even 100 watts. Is this coil actually supposed to be split and separated? I've changed out just about every thing adjustable in this chain.

L6 and L7 are to allow peaking in the upper segment of 10M. They are essentially just a little more inductance on 10M as opposed to 10U for T8 and T10, respectively. In production, the Mixer and RF stages were peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and L7 for maximum. Sometimes that 10M adjustment frequency has to be shifted a little one way or the other to result in fairly flat output from 28 to 29 MHz.

Transmit into a dummy load produces; 28.8 110Watts 28.4 130watts 21.35 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is neutralized on 10M and all bands appear to produce max power at plate dip.

Your output readings indicate soft PA tubes. Normal output is 200W on 80, 40 and 20M, 175W on 15M and 150W on 10M.

The calibration signal does not appear to produce the signal strength that It should on 10M and 15M but it appears that when hooked to an antenna the rig receives as good or a tad better than my TR-4Cw does.

Sounds more like a Calibrator problem than a receiver one. Try a 12BZ6 in V5.

I do not know how the AGC is supposed to work but it seems to me that there might be something wrong with the AGC on transmit and receive? It would be nice if the S-meter functioned as it should but If it cannot be fixed I can live without it. I have a feeling it points to other problems though.

The S-Meter (indicating AVC action) should kick up quickly, and then drop slowly when the signal stops. Check the voltages around V13a, which is the AVC amp. Again, I think the problem is more related to the meter than to the AVC circuitry. Does the receiver sound like the AVC is working correctly, e.g., little or no distortion on strong signals?

The background hum, while my brain tunes it out after an hour or so, really needs to go. Remember that I installed the TR-4 audio board out of my parts rig. This hum was not present, to the best of my

recollection until the S-Meter related resistors burnt. All grounds have been checked and double checked as well as the chassis screws.

Make sure the B+ for the Preamp stage is coming from the correct +150V supply.

I am going to upload a couple of pictures of the R-76 area if you want to look at them.

I have no idea what he was trying to do in there. Looks almost like he was trying to get the DSB signal out of the BAL MOD and take it to another mixer?? All I can recommend is doing your best to duplicate what the schematic and other references show.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13549. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 18:23:44 UTC
From: Richard Knoppow
Topic: 13108 Message: 13549

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 05, 2013 9:51 AM
Subject: [DrakeRadio] Re: TR-4 Repair

Regarding only the S meter. On my TR-4 both meters
bounce a lot, makes tuning difficult. Perhaps something has
been put across the meter to stop its bouncing, a large
capacitor perhaps, that would explain its slow response and
lack of response to speech peaks.
I am reminded of the radical modifications of WW-2
vintage equipment in some of the ham magazines. Mostly they
don't do anything useful. Someone evidently decided to
second guess Drake's designers.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13550. Re: [DrakeRadio] T-4XC vs T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 19:35:58 UTC
From: Steve Wedge
Topic: 606 Message: 13550

I just got a T-4XC in the other day and it's working fine with my R-4B. Aside from the mismatched series they play well together!

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 3, 2013, at 4:03 PM, Thomas Thomson <tatfoto@...> wrote:

> Thanks for the help. I'm pleased. I'll use this with my nemly refurbished R-4B.
> 73 Tom
>
> _____
> From: Steve Wedge <w1es1982@....com>
> To: DrakeRadio@yahoogroups.com
> Sent: Thu, May 2, 2013 6:36:25 PM
> Subject: Re: [DrakeRadio] T-4XC
>
> If you bought it for the price of an older set, you got a good deal, Thomas!
>
> As Garey points out, it can be used with any of the other receivers.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> "I can't complain, but sometimes I still do."
> - Joe Walsh
>
> If the above message appears, it came from Steve's Son of Laptop!
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, May 02, 2013 8:35 PM
> Subject: Re: [DrakeRadio] T-4XC
>
>
> Thomas -
>
> Not a whole lot of difference between them. The T-4XC has a fewmore
> SS stages, but functionally it is identical to the T-4XB.
>
> The differences are in the receiver. The natural 'pair' would be an
> R-4C which is an excellent receiver. It IS a more expensive receiver
> than the "B", especially when you consider that the crystal IF filters
> for the "C" are optional at extra cost, as is the Noise Blanker.
>

> Many prefer the "B" receiver because it has four L/C filter
> bandwidthsstandard, and a noise blanker. Some also prefer the gentler
> slopes of the L/C filters in the Passband Tuner over the sharp edged
> crystal filters in the "C".
>
> One operational advantage the "C" _pair_ offer is locked oscillators
> so that transceive operation is always exactly on frequency. The "B"
> has two separate crystal oscillators thatwill drift slightly with
> temperature changes, meaning that transceiveoperation isn't always
> 'perfect'.
>
> So. A lot depends upon what modes you operate, do you prefer to
> transceive(typically only pertinent to SSB operation,) do you tend to
> rag-chew or dig through pileups for DX, or are you into contesting?
>
> If you need the sharpest filters for DXing or contesting, the you'd
> want to consider the R-4C with the additional filters. If you just
> want to indulge in day-to-day ham conversations you might prefer the
> smoother, gentler sound of the R-4B. Kind of like comparing a NASCAR
> auto with a family sedan. Both will get you to the grocery store, but
> if you like the noise and performance and can tolerate the stiff
> shocks, the NASCAR version is going to outperform the family sedan!
>
> Bottom line, either transmitter will work fine with either receiver,
> only giving up the locked transceive capability with the R-4B.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Thomas Thomson wrote:
> > I recently bought what I thought was a T-4XB and ended up with an XC. Is
> this a good thing or is the XB a better radio?
> >
> >
>
>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13551. R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 19:38:36 UTC
From: Steve Wedge
Topic: 12324 Message: 13551

Thanks to all for the queries. The weekend got busy and I haven't taken the photos yet, so please bear with me. I'll get the info out soon.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

13552. WTB W-4 wattmeter or meter movement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 22:06:30 UTC
From: vacuuminded2@...
Topic: 13552 Message: 13552

Looking for a ratty W-4 wattmeter, or just a good meter from one.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

13553. S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 23:43:49 UTC
From: fred
Topic: 13553 Message: 13553

anyone have any ideas how to make a strain relief for the mike cord .

13554. Re: [DrakeRadio] S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-05 23:57:30 UTC
From: Ethan Blanton
Topic: 13553 Message: 13554

fred spake unto us the following wisdom:
> anyone have any ideas how to make a strain relief for the mike cord .

I have used several methods, but the easiest is a simple friction relief made out of a rubber grommet. If you use a typical mic cord of somewhere in the neighborhood of 3/16" diameter, and slip a regular 1/4" disc grommet over it before mounting, then the grommet will have to deform to fit in the U-shaped cutout of the S230. When you screw the metal plate down, it will press the grommet tightly against the cable and grip it securely.

You can get a pack containing suitable grommets for just a few dollars at Radio Shack:

http://www.radioshack.com/product/index.jsp?productId=2103392

This depends on the fact that the mic cord is somewhat loose in the S230 before mounting.

I have also had luck using a commercial mic cord removed from a hand mic, and carefully carving the strain relief to fit the S230. This yields a more professional-looking result, but I'm not sure it protects the cable substantially better than the simple grommet.

Ethan

13555. Re: [DrakeRadio] S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 00:31:10 UTC
From: vacuuminded2@...
Topic: 13553 Message: 13555

Depending upon what type of relief you want, but the hardware store will often yield a nice coil spring that will slip over the cable, you'll just have to be creative on fastening it to the connector. Think D-104 base.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On May 5, 2013, at 6:43 PM, "fred" <radiomanl@...> wrote:

> anyone have any ideas how to make a strain relief for the mike cord .
>
>

[Non-text portions of this message have been removed]

13556. RF Sig Gen.....Ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 01:47:43 UTC
From: Rich Arland
Topic: 13556 Message: 13556

Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen. Dumb move. Up until now I had gotten along without one, but now I am in need of a SMALL sig gen for the workbench. Anyone have any ideas of what might fill the bill that I might be able to find at Dayton?? Don't need anything fancy....HF freqs are mainly what I am interested in.
73

Rich Arland, K7SZ
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

[Non-text portions of this message have been removed]

13557. Re: [DrakeRadio] RF Sig Gen.....Ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 02:35:41 UTC
From: Paul Kraemer
Topic: 13556 Message: 13557

Another AN/URM-25D
I don't think I would be happy with any less
HP 8601could qualify as small but only goes down to 110khz and if not
working can be a challenge to repair.
The HP 8640 is hardly small, definately a challenge to repair and again only
goes to about 500khz.
.
The low freq coverage of the 25D sells it for me
Better grade tv repair shop stuff is ok but I'm spoiled by better.
I have few 25D left in inventory. I could put one in your hands?
Paul K0UYA
Home of the best AC-4 rebuild kit on the market.
----- Original Message -----
From: "Rich Arland" <k7sz@...>
To: <heathkit@yahoogroups.com>; "DrakeGroup@Yahoo"
<drakeradio@yahoogroups.com>
Sent: Sunday, May 05, 2013 8:47 PM
Subject: [DrakeRadio] RF Sig Gen.....Ideas

> Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen.
> Dumb move. Up until now I had gotten along without one, but now I am in
> need of a SMALL sig gen for the workbench. Anyone have any ideas of what
> might fill the bill that I might be able to find at Dayton?? Don't need
> anything fancy....HF freqs are mainly what I am interested in.
> 73
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
> (4th ed)
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13558. Re: [DrakeRadio] RF Sig Gen.....Ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 02:39:01 UTC
From: Steve Wedge
Topic: 13556 Message: 13558

Check out the one that elecraft makes. Not a full-on lab gen but seems fine for doing receiver checks.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 5, 2013, at 9:47 PM, Rich Arland <k7sz@...> wrote:

> Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen. Dumb move. Up until now I had gotten along without one, but now I am in need of a SMALL sig gen for the workbench. Anyone have any ideas of what might fill the bill that I might be able to find at Dayton?? Don't need anything fancy....HF freqs are mainly what I am interested in.
> 73
>
> Rich Arland, K7SZ
> Dacula, GA
>
> Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)
>
>
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13559. Re: [DrakeRadio] RF Sig Gen.....Ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 02:40:12 UTC
From: Steve Wedge
Topic: 13556 Message: 13559

I use a Logimetrics 921A. You can find them fairly cheap but they're not common.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 5, 2013, at 10:35 PM, "Paul Kraemer" <elespe@...> wrote:

> Another AN/URM-25D
> I don't think I would be happy with any less
> HP 8601could qualify as small but only goes down to 110khz and if not
> working can be a challenge to repair.
> The HP 8640 is hardly small, definately a challenge to repair and again only
> goes to about 500khz.
> .
> The low freq coverage of the 25D sells it for me
> Better grade tv repair shop stuff is ok but I'm spoiled by better.
> I have few 25D left in inventory. I could put one in your hands?
> Paul K0UYA
> Home of the best AC-4 rebuild kit on the market.
> ----- Original Message -----
> From: "Rich Arland" <k7sz@...>
> To: <heathkit@yahoogroups.com>; "DrakeGroup@Yahoo"
> <drakeradio@yahoogroups.com>
> Sent: Sunday, May 05, 2013 8:47 PM
> Subject: [DrakeRadio] RF Sig Gen.....Ideas
>
> > Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen.
> > Dumb move. Up until now I had gotten along without one, but now I am in
> > need of a SMALL sig gen for the workbench. Anyone have any ideas of what
> > might fill the bill that I might be able to find at Dayton?? Don't need
> > anything fancy....HF freqs are mainly what I am interested in.
> > 73
> >
> > Rich Arland, K7SZ
> > Dacula, GA
> >
> > Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
> > (4th ed)
> >
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13560. CD-For SPR4 REpairs & Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 02:59:28 UTC
From: andylingham29
Topic: 13560 Message: 13560

Does anybody have or know of a CD rom created for the SPR4, as I am keen to restore this fine but deaf receiver.? I have a circuit diagram but my failing eyesight makes it difficult to decipher the fine print. 73s de Andy 9M2PV.

13561. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 03:39:51 UTC
From: Donley
Topic: 13543 Message: 13561

What is the operating voltage for the Antec True Quiet 120?

73 Richard

----- Original Message -----
From: Abqcooks@...
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 05, 2013 2:00 PM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

For cooling fans on the top of the L4B itself I found what I think are ideal.
Google the Antec True Quiet 120
They are just the right size to sit over each of the 3-500s and are in fact super quiet. There's a dip switch to set for either 600 rpm or 1000 rpm. The 600 rpm setting moves plenty of air up out of the cabinet and makes almost zero noise. They have them at Amazon and Best Buy for 11 dollars....Staples for 15 dollars. Small price for what they do so quietly.
For the power supply I also found the cabinet to get pretty hot to the touch and so did like
Garey suggests with small nearly silent fans. The cabinet now stays cool to the touch. I power the fans with walworts plugged into the power strip that I use as a power switch to turn on the T4XC. Anyway, try the Antec fans....you wont even know they are on.
73 Jim

-----Original Message-----
From: Patrick Ross <plrconsult@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, May 5, 2013 8:02 am
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Hi Gary:
Thank you for the prompt and informative response. I appreciate that.

I have done more research and testing with an infrared temperature sensor/readout and have determined that the source of the heat is the two (2) 50K 50W resistors which are inline when the amp is in the SSB mode (2500V). The resistors get very hot (120 degrees C) even when the amp is in standby mode and the SSB switch is "on".
The transformer plates themselves are much cooler - about 30 C.

So, I will go through my junk box and install a fan or two on the PS just for insurance.

73, and tnx agn. Hope to meet you on the air.

Pat, VE3CNX

_____
From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 5, 2013 9:38:14 AM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Patrick -

You can never have too much air on tube gear, unless it blows the
tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK),
who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply,
blowing UP!. It doesn't have to be a turbine, just enough (silent) to
'encourage' that hot air to keep on rising, and get it away from the
area. I also put a fan on top of the L-4B,right over the tubes, same
type, blowing up, for the same reason. The PS and the amp right over
the tubeswill get too hot to comfortably hold your hand on. With the
fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are
cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't
youuse them?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted
with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power
Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm,
notwithstanding that it out in the open and in a well ventilated area. I am
concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX
>

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13562. Re: [DrakeRadio] RF Sig Gen.....Ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 03:54:34 UTC
From: Richard Fredrickson
Topic: 13556 Message: 13562

The Elecraft unit works well, and there are a number of attenuators offered as well, if you don't like to roll your own.

Dick
WA0DIM

From: Steve Wedge <w1es1982@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 5, 2013 7:40 PM
Subject: Re: [DrakeRadio] RF Sig Gen.....Ideas

I use a Logimetrics 921A. You can find them fairly cheap but they're not common.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 5, 2013, at 10:35 PM, "Paul Kraemer" <mailto:elespe%40lisco.com> wrote:

> Another AN/URM-25D
> I don't think I would be happy with any less
> HP 8601could qualify as small but only goes down to 110khz and if not
> working can be a challenge to repair.
> The HP 8640 is hardly small, definately a challenge to repair and again only
> goes to about 500khz.
> .
> The low freq coverage of the 25D sells it for me
> Better grade tv repair shop stuff is ok but I'm spoiled by better.
> I have few 25D left in inventory. I could put one in your hands?
> Paul K0UYA
> Home of the best AC-4 rebuild kit on the market.
> ----- Original Message -----
> From: "Rich Arland" <mailto:k7sz%40live.com>
> To: <mailto:heathkit%40yahoogroups.com>; "DrakeGroup@Yahoo"
> <mailto:drakeradio%40yahoogroups.com>
> Sent: Sunday, May 05, 2013 8:47 PM
> Subject: [DrakeRadio] RF Sig Gen.....Ideas
>
> > Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen.
> > Dumb move. Up until now I had gotten along without one, but now I am in
> > need of a SMALL sig gen for the workbench. Anyone have any ideas of what
> > might fill the bill that I might be able to find at Dayton?? Don't need
> > anything fancy....HF freqs are mainly what I am interested in.
> > 73
> >
> > Rich Arland, K7SZ

> > Dacula, GA
> >
> > Author: "The ARRL's Low Power Communications, the Art and Science of QRP"
> > (4th ed)
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13564. Re: S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 05:33:44 UTC
From: radiomanL
Topic: 13553 Message: 13564

what happened is that my cat pushed the microphone off the desk and when it fell there was nothing to prevent the cord from being pulled out of the connector . the red wire was broken away from the connection , the white and black ones were still connected . will see if I still have any grommets or an old larger diametre microphome cable .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13565. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 04:53:22 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 13565

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /Precision/Precision-E-200-C-RF-Gen.PDF
Uploaded by : radiomanradioman <radiomanl@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/Precision/Precision-E-200-C-RF-Gen.PDF

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

radiomanradioman <radiomanl@...>

13566. Re: [DrakeRadio] Re: S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 05:01:15 UTC
From: Richard Knoppow
Topic: 13553 Message: 13566

----- Original Message -----
From: "radiomanL" <radiomanl@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 05, 2013 10:33 PM
Subject: [DrakeRadio] Re: S230 microphone plug

> what happened is that my cat pushed the microphone off the
> desk and when it fell there was nothing to prevent the
> cord from being pulled out of the connector . the red wire
> was broken away from the connection , the white and black
> ones were still connected . will see if I still have any
> grommets or an old larger diametre microphome cable .
> Andrew
> kd5pnt

Is this the same cat that eats your homework?
Most TRS connectors I've seen have some form of strain relief or cord holder built-in. The old telephone co and military connectors have a recessed area just in front of the ring the cord enters by. I flat strap fits into it and is crimped onto the the cord. Some cords also have a thikened area, made by folding the cloth covering over and pulling it back that threads into the entrance ring. So much for military and telco practice. The standard sort of plug has a couple of wings at the cord entry which are meant to fold over and be crimped. This works fairly well. It takes a strong pull to rip the cord out. Some right angle plugs do not have any sort of strain relief. Some have enough clearance to put a tie wrap inside. On these a grommet under compression will help.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13568. Re: S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 13:12:54 UTC
From: radiomanL
Topic: 13553 Message: 13568

Thanks for the reminder , I knew I had seen those but did not remember where , will look and see if I have any old telephone cords . The S230 is a right angle type and has no strain relief . it's the same cat that keeps the FT950 full of hair .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13569. Re: [DrakeRadio] RF Sig Gen....need ideas

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 13:26:07 UTC
From: Garey Barrell
Topic: 13569 Message: 13569

Rich -

Have you considered something like the N3ZI (or one of a dozen or so
others,) in a box with a gain module and a homebrew attenuator?

If I was closer, you could borrow my HP606, it's 'compact'.!

The Heath IG-42 is a nice small generator and can be calibrated quite
well. The IG-102 is ok, but needs a separate counter. Any of these
need an external step attenuator for accurate level measurements

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Rich Arland wrote:
> Prior to leaving our old place in PA, I sold my trusty URM-25D RF sig gen. Dumb move. Up until now I had gotten along without one, but now I am in need of a SMALL sig gen for the workbench. Anyone have any ideas of what might fill the bill that I might be able to find at Dayton?? Don't need anything fancy....HF freqs are mainly what I am interested in. PLEASE don't tell me to use my laptop computer.....I really HATE computer based test gear!!
> 73
>

13570. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 13:35:01 UTC
From: Garey Barrell
Topic: 13543 Message: 13570

Richard -

12V DC nominal. 120mA high speed, 60 mA low speed

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Donley wrote:
> What is the operating voltage for the Antec True Quiet 120?
>
> 73 Richard
>
>

13571. Re: [DrakeRadio] CD-For SPR4 REpairs & Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 16:12:26 UTC
From: Garey Barrell
Topic: 13560 Message: 13571

Andy -

Sorry, I don't have a CD for the the SPR-4.

I DO have a high quality scan of the manual and schematic. I've reworked the schematic so it can be blown up to 3' x 4' on a large format printer, if you have a business center of some sort. Or of course it can be blown up on screen and partial sections enlarged for printing on 8.5 x 11 paper.

Themanual has drawings of the pc boards with parts identified, and of course can also be blown up on the computer

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

andylingham29 wrote:
> Does anybody have or know of a CD rom created for the SPR4, as I am keen to restore this fine but deaf receiver.? I have a circuit diagram but my failing eyesight makes it difficult to decipher the fine print. 73s de Andy 9M2PV.
>

13572. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 18:11:45 UTC
From: slowcountry1
Topic: 13108 Message: 13572

Garey,

I removed R163 and R62 and they checked within tolerance. For smiles and grins, I checked R-55 it was 9.6K, I replaced it with 8.2K and R-51 was 10.4K, I replaced it with 8.2K. I checked these, even though they weren't in the circuit because they were close to R-71 that had burnt and I wanted to see if they had gotten hot and changed value.

My schematic stops at R162 so I did not find it on the drawing. The S-Meter is still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.

Replacing V5 with a 12BZ6 took care of the low S meter readings on 10,15 and 20M. I now have S9+10 or so. Again, I have to wait for the S-Meter to climb.

Strong signals are not distorted at all on receive. I checked the voltages, on receive, of V13.

1. -.24VDC
2. -55.87VDC
3. -54.16
4.
5.
6. -1.29VDC
7. -55.7VDC Note DIMM kills receive when connected here
8. -52.3VDC
9. 6.14VAC

I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.

Thanks,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
>
> slowcountry1 wrote:
> > Garey,
> >
> > This is where I am currently;
> >
> > Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one

shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.

> I have no idea what someone was doing messing around in this area. The
> basic circuit and arrangement haven't changed since the first TR-4,
> and perhaps even the TR-3! :-)
> >
> > Yesterday, I changed out T-1. I have now replaced all of the cans that relate to 10 meters. This did not make any change on the S-Meter during alignment. I aligned the rig as best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.
> >
> > Here are the problems that I have found;
> >
> > 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.
>
> Make sure R163 is 100 ohms, may have increased due to overloading.
> Make sure R62 is 33k ohms.
>
> 2. For the first time, I transmitted on the air yesterday. I
> transmitted on all bands, 80 - 10 and received good audio reports. I
> noticed that the S-Meter does not kick upscale with voice peaks as it
> does on my TR-4Cw to indicate AGC activity. I swapped out the 12AX7
> but no change.
>
> May be related to the slow response of the S-Meter, i.e., the just
> can't respond fast enough to show.
>
>
> 3. I have an underlying and highly annoying what appears to be an AC
> hum from the speaker. I have no clue where the source of this is. I
> tried the headphone jack and have it there as well.
>
> Recheck wiring and grounding of the preamp stage. Sounds like you may
> have a ground loop.
>
> 4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested,
> split in two and spread apart. I pulled the slug tuned L6 and L7 from
> my parts rig and installed them. I tuned them per the TR-4C manual
> however; I was only able to obtain 40 watt on transmit. I then hand

> wound a new L7 and installed it. I was only able to obtain 65 watts on
> transmit. I then reinstalled the molested one and transmit at an even
> 100 watts. Is this coil actually supposed to be split and separated?
> I've changed out just about every thing adjustable in this chain.
>
> L6 and L7 are to allow peaking in the upper segment of 10M. They are
> essentially just a little more inductance on 10M as opposed to 10U for
> T8 and T10, respectively. In production, the Mixer and RF stages were
> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
> L7 for maximum. Sometimes that 10M adjustment frequency has to be
> shifted a little one way or the other to result in fairly flat output
> from 28 to 29 MHz.
>
> Transmit into a dummy load produces; 28.8 110Watts 28.4 130watts 21.35
> 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is
> neutralized on 10M and all bands appear to produce max power at plate
> dip.
>
> Your output readings indicate soft PA tubes. Normal output is 200W on
> 80, 40 and 20M, 175W on 15M and 150W on 10M.
>
> The calibration signal does not appear to produce the signal strength
> that It should on 10M and 15M but it appears that when hooked to an
> antenna the rig receives as good or a tad better than my TR-4Cw does.
>
> Sounds more like a Calibrator problem than a receiver one. Try a
> 12BZ6 in V5.
>
> I do not know how the AGC is supposed to work but it seems to me that
> there might be something wrong with the AGC on transmit and receive?
> It would be nice if the S-meter functioned as it should but If it
> cannot be fixed I can live without it. I have a feeling it points to
> other problems though.
>
> The S-Meter (indicating AVC action) should kick up quickly, and then
> drop slowly when the signal stops. Check the voltages around V13a,
> which is the AVC amp. Again, I think the problem is more related to
> the meter than to the AVC circuitry. Does the receiver sound like the
> AVC is working correctly, e.g., little or no distortion on strong signals?
>
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> of my parts rig. This hum was not present, to the best of my
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> have been checked and double checked as well as the chassis screws.
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> Make sure the B+ for the Preamp stage is coming from the correct +150V
> supply.
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> I am going to upload a couple of pictures of the R-76 area if you want

> to look at them.
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> I have no idea what he was trying to do in there. Looks almost like
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> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>

13573. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 19:41:35 UTC
From: Garey Barrell
Topic: 13108 Message: 13573

Doug -

I'm working from schematic 27000, in the Versions directory on the CD. I believe this is the correct schematic as the DUT s/n is 273xx?

R163, R168 and R71 all come together on the + lead of C145D. + DC voltage bus, should be +250 VDC or so.

R70and the + meter terminal come together on the lead to the output transformer and plate of V17.

R71 and the -meter terminal come together with R53, R76 and the secondary of T13.

This compares the plate current of V17 to that of V11 and V15. The bridge is balanced by way of the ZERO control with no input.

In receive, AVC is applied to the Grids of V11 and V12, reducing the current drawn by V11and causing the meter to increase. The more signal, the more AVC, less current by V11, higher meter reading.

In transmit, ALC voltage is applied to the Grid of V15, reducing the current drawn and increasing the meter reading.

Unless the meter itself is sluggish, (possible, it's NOT a quality movement,) one of the devices above is the culprit. Connect a test meter across the S-Meter and see if the voltage across it is coming up slowly or quickly!

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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slowcountry1 wrote:
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> My schematic stops at R162 so I did not find it on the drawing. The S-Meter is still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes

over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.
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> I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.
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> Thanks,
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>> I have no idea what someone was doing messing around in this area. The
>> basic circuit and arrangement haven't changed since the first TR-4,
>> and perhaps even the TR-3! :-)
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best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.
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>>> Here are the problems that I have found;
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>>> 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.
>> Make sure R163 is 100 ohms, may have increased due to overloading.
>> Make sure R62 is 33k ohms.
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>> transmitted on all bands, 80 - 10 and received good audio reports. I
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>> but no change.
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>> May be related to the slow response of the S-Meter, i.e., the just
>> can't respond fast enough to show.
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>> have a ground loop.
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>> split in two and spread apart. I pulled the slug tuned L6 and L7 from
>> my parts rig and installed them. I tuned them per the TR-4C manual
>> however; I was only able to obtain 40 watt on transmit. I then hand
>> wound a new L7 and installed it. I was only able to obtain 65 watts on
>> transmit. I then reinstalled the molested one and transmit at an even
>> 100 watts. Is this coil actually supposed to be split and separated?
>> I've changed out just about every thing adjustable in this chain.
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>> L6 and L7 are to allow peaking in the upper segment of 10M. They are
>> essentially just a little more inductance on 10M as opposed to 10U for
>> T8 and T10, respectively. In production, the Mixer and RF stages were
>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
>> shifted a little one way or the other to result in fairly flat output
>> from 28 to 29 MHz.
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>> Transmit into a dummy load produces; 28.8 110Watts 28.4 130watts 21.35
>> 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is
>> neutralized on 10M and all bands appear to produce max power at plate
>> dip.

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>> Your output readings indicate soft PA tubes. Normal output is 200W on
>> 80, 40 and 20M, 175W on 15M and 150W on 10M.
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>> The calibration signal does not appear to produce the signal strength
>> that It should on 10M and 15M but it appears that when hooked to an
>> antenna the rig receives as good or a tad better than my TR-4Cw does.
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>> Sounds more like a Calibrator problem than a receiver one. Try a
>> 12BZ6 in V5.
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>> there might be something wrong with the AGC on transmit and receive?
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>> cannot be fixed I can live without it. I have a feeling it points to
>> other problems though.
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>> The S-Meter (indicating AVC action) should kick up quickly, and then
>> drop slowly when the signal stops. Check the voltages around V13a,
>> which is the AVC amp. Again, I think the problem is more related to
>> the meter than to the AVC circuitry. Does the receiver sound like the
>> AVC is working correctly, e.g., little or no distortion on strong signals?
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>> Make sure the B+ for the Preamp stage is coming from the correct +150V
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13574. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 20:03:12 UTC
From: Richard Knoppow
Topic: 13108 Message: 13574

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 06, 2013 11:11 AM
Subject: [DrakeRadio] Re: TR-4 Repair

If you have not already check the meter itself by
disconnecting it and putting an ohm meter across it with a
fairly large resistor to limit the current. See what the
response it. I can't figure out why the meter itself would
be slow but its well to eliminate everything.
A scope is the best tool to find the hum.
Also, if you have Garrey's disc have the schematic
printed out large. Any office supply place can do this.
18x24 is not to large. Then trace out the meter circuit with
a colored pencil or highlighter. I find many schematics are
convoluted and confusing and my eye tends to lose track of
long traces that wind around. You may also have to redraw
some parts of the schematic to clarify what is actually
there.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13575. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 20:17:08 UTC
From: slowcountry1
Topic: 13108 Message: 13575

Garey,

The rig serial number is 26095, I'm using schematic 26000. I'm not great at reading the schematics but have been trying to trace the circuit out. I have C145A, B and C; the three section cap not the 4 section in the later models.

The S-Meter was very "bouncy" until frying the related resistors.

I will put my voltmeter across the S-Meter and see what the voltage does.

I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
ve spent weeks just repairing screwed up mods and poor mechanical workmanship.

Thanks,

Doug N9XTF

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> CD. I believe this is the correct schematic as the DUT s/n is 273xx?
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> secondary of T13.
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> This compares the plate current of V17 to that of V11 and V15. The
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> current drawn by V11and causing the meter to increase. The more
> signal, the more AVC, less current by V11, higher meter reading.
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> current drawn and increasing the meter reading.
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> Unless the meter itself is sluggish, (possible, it's NOT a quality

> movement,) one of the devices above is the culprit. Connect a test
> meter across the S-Meter and see if the voltage across it is coming up
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13576. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 20:30:24 UTC
From: Garey Barrell
Topic: 13108 Message: 13576

OK. Well look at 27000. The only difference at this point is that there is no R163/C145D decoupling network, rest of the circuit is the same. That tacked on electrolytic you spotted may be an 'update', by the last guy in there.

You can use the ohmmeter function of your DMM to check the movement. Ohmmeter current is so low in DMMs you can measure direct.

I was afraid of that. Repair guys don't want modified units, since as you have found, you can spend hours trying to UNDO what some CB'er thought was a good idea..... The customer isn't going to want to pay for all those hours either! :-)

On the other hand, it's a great learning experience, with the added benefit that if you give up and part it out (absolute last resort) you can still get your money out of it.

Keep plugging, you'll get there!

73, Garey - K4OAH
Glen Allen, VA

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>>>>> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.
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>>>>> 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.
>>>> Make sure R163 is 100 ohms, may have increased due to overloading.
>>>> Make sure R62 is 33k ohms.
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>>>> transmitted on all bands, 80 - 10 and received good audio reports. I
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>>>> hum from the speaker. I have no clue where the source of this is. I
>>>> tried the headphone jack and have it there as well.
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>>>> Recheck wiring and grounding of the preamp stage. Sounds like you may
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>>>> 4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested,
>>>> split in two and spread apart. I pulled the slug tuned L6 and L7 from
>>>> my parts rig and installed them. I tuned them per the TR-4C manual
>>>> however; I was only able to obtain 40 watt on transmit. I then hand
>>>> wound a new L7 and installed it. I was only able to obtain 65 watts on
>>>> transmit. I then reinstalled the molested one and transmit at an even
>>>> 100 watts. Is this coil actually supposed to be split and separated?
>>>> I've changed out just about every thing adjustable in this chain.
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>>>> L6 and L7 are to allow peaking in the upper segment of 10M. They are
>>>> essentially just a little more inductance on 10M as opposed to 10U for
>>>> T8 and T10, respectively. In production, the Mixer and RF stages were
>>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
>>>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
>>>> shifted a little one way or the other to result in fairly flat output
>>>> from 28 to 29 MHz.
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>>>> 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is
>>>> neutralized on 10M and all bands appear to produce max power at plate
>>>> dip.
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>>>> Your output readings indicate soft PA tubes. Normal output is 200W on

>>>> 80, 40 and 20M, 175W on 15M and 150W on 10M.
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>>>> drop slowly when the signal stops. Check the voltages around V13a,
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>>>> AVC is working correctly, e.g., little or no distortion on strong signals?
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>>>> really needs to go. Remember that I installed the TR-4 audio board out
>>>> of my parts rig. This hum was not present, to the best of my
>>>> recollection until the S-Meter related resistors burnt. All grounds
>>>> have been checked and double checked as well as the chassis screws.
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>>>> Make sure the B+ for the Preamp stage is coming from the correct +150V
>>>> supply.
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>>>> I am going to upload a couple of pictures of the R-76 area if you want
>>>> to look at them.
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>>>> I have no idea what he was trying to do in there. Looks almost like
>>>> he was trying to get the DSB signal out of the BAL MOD and take it to
>>>> another mixer?? All I can recommend is doing your best to duplicate
>>>> what the schematic and other references show.
>>>>
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>
> Yahoo! Groups Links
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13577. Re: S230 microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 21:50:19 UTC
From: radiomanL
Topic: 13553 Message: 13577

I think I got the problem solved . cut the crimp tab off of an extra 5 pin DIN plug shell and soldered it to the ground plate of the S230 . not pretty but should work and you don't see the inside anyway .
Andrew
kd5pnt

[Non-text portions of this message have been removed]

13578. Re: Considering a Drake TR-7. Recommendations? Version 2.1

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 20:54:17 UTC
From: branton_thomas
Topic: 12765 Message: 13578

My apologies, I'm a CPA in real life and I got so caught up in tax season that I fell off the radio hunting wagon and I did not follow up on my TR-7 quest. If you have a very nice TR-7 and/or R-7 that needs to find a new home please contact me. I am looking and interested in setting up a TR-7 station this summer.

Thanks and kindest regards,

Tom
WD5DFE

--- In DrakeRadio@yahoogroups.com, "branton_thomas" <TBranton@...> wrote:
>
> Good morning everyone,
>
> I wanted to send my thanks for the guidance and recommendations I received from members. I got some great advice and a lead on what may be a fine rig for me. If a further thought occurs to anyone you would like to share on the TR-7, please do so.
>
> Kindest regards and 73's
>
> Tom
>
>
>
> --- In DrakeRadio@yahoogroups.com, "branton_thomas" <TBranton@> wrote:
> >
> > Good afternoon everyone,
> >
> > After a long absence from ham radio I am excited about re-entering the hobby and I am interested in a TR-7 station. If I found a nice one perhaps I could later add the R-7 receiver.
> >
> > Any words of wisdom from past or present TR-7 owners would be most welcome. Anything I should particularly look for in a potential purchase? Any thoughts on what a nice TR-7 and power supply would cost? There is one listed on EBay at the moment.
> >
> > Thanks and 73's
> >
> > Tom
> > Ex WD5DFE
> >
>

13579. RE: [DrakeRadio] CD-For SPR4 REpairs & Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 21:01:37 UTC
From: Terrell Hamilton
Topic: 13560 Message: 13579

Hey, Garey -

I'd like to have a scan of the schematic for my SPR-4, too.
Do you charge for that? If so, no problem - your other CD's have been very valuable to me, and I'd like to be able to have a larger schematic for my SPR-4.

73,

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Monday, May 06, 2013 9:12 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] CD-For SPR4 REpairs & Maintenance

Andy -

Sorry, I don't have a CD for the the SPR-4.

I DO have a high quality scan of the manual and schematic. I've reworked the schematic so it can be blown up to 3' x 4' on a large format printer, if you have a business center of some sort. Or of course it can be blown up on screen and partial sections enlarged for printing on 8.5 x 11 paper.

Themanual has drawings of the pc boards with parts identified, and of course can also be blown up on the computer

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

andylingham29 wrote:
> Does anybody have or know of a CD rom created for the SPR4, as I am keen to restore this fine but deaf receiver.? I have a circuit diagram but my failing eyesight makes it difficult to decipher the fine print. 73s de Andy 9M2PV.
>

[Non-text portions of this message have been removed]

13580. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 21:07:19 UTC
From: Steve Wedge
Topic: 13108 Message: 13580

It'll be interesting to see if it is indeed the meter itself. I have seen it happen.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, May 06, 2013 4:30 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: TR-4 Repair

OK. Well look at 27000. The only difference at this point is that
there is no R163/C145D decoupling network, rest of the circuit is the
same. That tacked on electrolytic you spotted may be an 'update', by
the last guy in there.

You can use the ohmmeter function of your DMM to check the movement.
Ohmmeter current is so low in DMMs you can measure direct.

I was afraid of that. Repair guys don't want modified units, since as
you have found, you can spend hours trying to UNDO what some CB'er
thought was a good idea..... The customer isn't going to want to pay
for all those hours either! :-)

On the other hand, it's a great learning experience, with the added
benefit that if you give up and part it out (absolute last resort) you
can still get your money out of it.

Keep plugging, you'll get there!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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slowcountry1 wrote:
> Garey,
>
> The rig serial number is 26095, I'm using schematic 26000. I'm not great at reading the schematics but have been trying to trace the circuit out. I have C145A, B and C; the three section cap not the 4 section in the later models.
>
> The S-Meter was very "bouncy" until frying the related resistors.
>

> I will put my voltmeter across the S-Meter and see what the voltage does.
>
> I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
> ve spent weeks just repairing screwed up mods and poor mechanical workmanship.
>
> Thanks,
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> I'm working from schematic 27000, in the Versions directory on the
>> CD. I believe this is the correct schematic as the DUT s/n is 273xx?
>>
>> R163, R168 and R71 all come together on the + lead of C145D. + DC
>> voltage bus, should be +250 VDC or so.
>>
>> R70and the + meter terminal come together on the lead to the output
>> transformer and plate of V17.
>>
>> R71 and the -meter terminal come together with R53, R76 and the
>> secondary of T13.
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>> This compares the plate current of V17 to that of V11 and V15. The
>> bridge is balanced by way of the ZERO control with no input.
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>> In receive, AVC is applied to the Grids of V11 and V12, reducing the
>> current drawn by V11and causing the meter to increase. The more
>> signal, the more AVC, less current by V11, higher meter reading.
>>
>> In transmit, ALC voltage is applied to the Grid of V15, reducing the
>> current drawn and increasing the meter reading.
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>> Unless the meter itself is sluggish, (possible, it's NOT a quality
>> movement,) one of the devices above is the culprit. Connect a test
>> meter across the S-Meter and see if the voltage across it is coming up
>> slowly or quickly!
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>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
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>> slowcountry1 wrote:

>>> Garey,
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>>> I removed R163 and R62 and they checked within tolerance. For smiles and grins, I checked R-55 it was 9.6K, I replaced it with 8.2K and R-51 was 10.4K, I replaced it with 8.2K. I checked these, even though they weren't in the circuit because they were close to R-71 that had burnt and I wanted to see if they had gotten hot and changed value.
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>>> My schematic stops at R162 so I did not find it on the drawing. The S-Meter is still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.
>>>
>>> Replacing V5 with a 12BZ6 took care of the low S meter readings on 10,15 and 20M. I now have S9+10 or so. Again, I have to wait for the S-Meter to climb.
>>>
>>> Strong signals are not distorted at all on receive. I checked the voltages, on receive, of V13.
>>>
>>> 1. -.24VDC
>>> 2. -55.87VDC
>>> 3. -54.16
>>> 4.
>>> 5.
>>> 6. -1.29VDC
>>> 7. -55.7VDC Note DIMM kills receive when connected here
>>> 8. -52.3VDC
>>> 9. 6.14VAC
>>>
>>> I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.
>>>
>>> Thanks,
>>>
>>> Doug N9XTF
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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>>>>> Garey,
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>>>>> This is where I am currently;
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>>>>> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out

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>>>> tried the headphone jack and have it there as well.
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>>>> Recheck wiring and grounding of the preamp stage. Sounds like you may
>>>> have a ground loop.
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>>>> 100 watts. Is this coil actually supposed to be split and separated?
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>>>> T8 and T10, respectively. In production, the Mixer and RF stages were
>>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
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>>>> drop slowly when the signal stops. Check the voltages around V13a,
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13581. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 21:18:00 UTC
From: slowcountry1
Topic: 13108 Message: 13581

Garey and Steve,

Well its confirmed, my head is up the preverbal butt! Once again, I did not employ the tried and true KISS method. DIMM was bouncing around with voltage changes but S-meter was not. I pulled the meter, gently shook it and the needle did not move like they always do. I opened it up and somehow the vertical needle between the C cup appears to be "sticky". Didn't take time to futz with it but replaced it with one out of the junker. It now operates as expected once again. I have no clue how it worked and then got sticky. I'll let it run for a day or two and then I'll remove the extra electrolytic and see what happens there.

My TR-4Cw plate meter was like it was on a rubber band and I had to replace it to get it to calm down. Would have never guessed that they could also stick.

Last trick is the carrier balance re-wire. I will attempt it this weekend, that's going to be a real hassle. Once all is working well, then I've got to undertake a cleanup. I don't know where this thing was stored, but the chassis has all kinds of crud on it.

Thanks for all the help guys!!!

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
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> there is no R163/C145D decoupling network, rest of the circuit is the
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> >>> 6. -1.29VDC
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> >>>
> >>> I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.
> >>>
> >>> Thanks,
> >>>
> >>> Doug N9XTF

> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> slowcountry1 wrote:
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> >>>>> This is where I am currently;
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> >>>>> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.
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> >>>> Recheck wiring and grounding of the preamp stage. Sounds like you may
> >>>> have a ground loop.
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> >>>> 4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested,
> >>>> split in two and spread apart. I pulled the slug tuned L6 and L7 from
> >>>> my parts rig and installed them. I tuned them per the TR-4C manual
> >>>> however; I was only able to obtain 40 watt on transmit. I then hand
> >>>> wound a new L7 and installed it. I was only able to obtain 65 watts on
> >>>> transmit. I then reinstalled the molested one and transmit at an even
> >>>> 100 watts. Is this coil actually supposed to be split and separated?
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> >>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
> >>>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
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> >>>> from 28 to 29 MHz.
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> >>>>
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> >>>> 12BZ6 in V5.
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> >>>> cannot be fixed I can live without it. I have a feeling it points to
> >>>> other problems though.
> >>>>
> >>>> The S-Meter (indicating AVC action) should kick up quickly, and then
> >>>> drop slowly when the signal stops. Check the voltages around V13a,
> >>>> which is the AVC amp. Again, I think the problem is more related to
> >>>> the meter than to the AVC circuitry. Does the receiver sound like the
> >>>> AVC is working correctly, e.g., little or no distortion on strong signals?
> >>>>
> >>>> The background hum, while my brain tunes it out after an hour or so,
> >>>> really needs to go. Remember that I installed the TR-4 audio board out

> >>>> of my parts rig. This hum was not present, to the best of my
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> >>>> have been checked and double checked as well as the chassis screws.
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> >>>> Make sure the B+ for the Preamp stage is coming from the correct +150V
> >>>> supply.
> >>>>
> >>>> I am going to upload a couple of pictures of the R-76 area if you want
> >>>> to look at them.
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> >>>> he was trying to get the DSB signal out of the BAL MOD and take it to
> >>>> another mixer?? All I can recommend is doing your best to duplicate
> >>>> what the schematic and other references show.
> >>>>
> >>>>
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
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> >

13582. Re microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 21:50:25 UTC
From: Dennis Weal
Topic: 13582 Message: 13582

Woulda been quicker and easier to super glue the mic to the desk. ((*>*))

Den

I was so depressed last night thinking about the economy, wars, jobs, my savings, Social Security, retirement funds, etc., I called the Suicide Hotline. I got a call center in Pakistan, and when I told them I was suicidal, they got all excited, and asked if I could drive a truck.

[Non-text portions of this message have been removed]

13583. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 22:15:52 UTC
From: Steve Wedge
Topic: 13108 Message: 13583

Congrats on the find, Doug!

If it's that cruddy, when you're ready, take the meter and tubes back out and put the rig in the sink or tub. You shouldn't submerge, but some good, surfacting cleaner and a variety of brushes will clean it up. Rinse with plain water, then pour a jug of distilled water over it. Finish it up with an air gun at about 50 psi and a thorough dry (I use a 170 oven and turn it off as soon as it hits 170 - leaving the light on to contribute a little heat).

I'm gonna catch h-e-double-hockeysticks for the above, but this works for me and I've cleaned many, many rigs using this method.

Have fun!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: slowcountry1
Sent: Monday, May 06, 2013 5:18 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: TR-4 Repair

Garey and Steve,

Well its confirmed, my head is up the preverbal butt! Once again, I did not employ the tried and true KISS method. DIMM was bouncing around with voltage changes but S-meter was not. I pulled the meter, gently shook it and the needle did not move like they always do. I opened it up and somehow the vertical needle between the C cup appears to be "sticky". Didn't take time to futz with it but replaced it with one out of the junker. It now operates as expected once again. I have no clue how it worked and then got sticky. I'll let it run for a day or two and then I'll remove the extra electrolytic and see what happens there.

My TR-4Cw plate meter was like it was on a rubber band and I had to replace it to get it to calm down. Would have never guessed that they could also stick.

Last trick is the carrier balance re-wire. I will attempt it this weekend, that's going to be a real hassle. Once all is working well, then I've got to undertake a cleanup. I don't know where this thing was stored, but the chassis has all kinds of crud on it.

Thanks for all the help guys!!!

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>

> OK. Well look at 27000. The only difference at this point is that
> there is no R163/C145D decoupling network, rest of the circuit is the
> same. That tacked on electrolytic you spotted may be an 'update', by
> the last guy in there.
>
> You can use the ohmmeter function of your DMM to check the movement.
> Ohmmeter current is so low in DMMs you can measure direct.
>
> I was afraid of that. Repair guys don't want modified units, since as
> you have found, you can spend hours trying to UNDO what some CB'er
> thought was a good idea..... The customer isn't going to want to pay
> for all those hours either! :-)
>
> On the other hand, it's a great learning experience, with the added
> benefit that if you give up and part it out (absolute last resort) you
> can still get your money out of it.
>
> Keep plugging, you'll get there!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey,
> >
> > The rig serial number is 26095, I'm using schematic 26000. I'm not great at reading the schematics but have been trying to trace the circuit out. I have C145A, B and C; the three section cap not the 4 section in the later models.
> >
> > The S-Meter was very "bouncy" until frying the related resistors.
> >
> > I will put my voltmeter across the S-Meter and see what the voltage does.
> >
> > I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
> > ve spent weeks just repairing screwed up mods and poor mechanical workmanship.
> >
> > Thanks,
> >
> > Doug N9XTF
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Doug -
> >>

> >> I'm working from schematic 27000, in the Versions directory on the
> >> CD. I believe this is the correct schematic as the DUT s/n is 273xx?
> >>
> >> R163, R168 and R71 all come together on the + lead of C145D. + DC
> >> voltage bus, should be +250 VDC or so.
> >>
> >> R70and the + meter terminal come together on the lead to the output
> >> transformer and plate of V17.
> >>
> >> R71 and the -meter terminal come together with R53, R76 and the
> >> secondary of T13.
> >>
> >> This compares the plate current of V17 to that of V11 and V15. The
> >> bridge is balanced by way of the ZERO control with no input.
> >>
> >> In receive, AVC is applied to the Grids of V11 and V12, reducing the
> >> current drawn by V11and causing the meter to increase. The more
> >> signal, the more AVC, less current by V11, higher meter reading.
> >>
> >> In transmit, ALC voltage is applied to the Grid of V15, reducing the
> >> current drawn and increasing the meter reading.
> >>
> >> Unless the meter itself is sluggish, (possible, it's NOT a quality
> >> movement,) one of the devices above is the culprit. Connect a test
> >> meter across the S-Meter and see if the voltage across it is coming up
> >> slowly or quickly!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
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> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> I removed R163 and R62 and they checked within tolerance. For smiles and grins, I checked R-55 it was 9.6K, I replaced it with 8.2K and R-51 was 10.4K, I replaced it with 8.2K. I checked these, even though they weren't in the circuit because they were close to R-71 that had burnt and I wanted to see if they had gotten hot and changed value.
> >>>
> >>> My schematic stops at R162 so I did not find it on the drawing. The S-Meter is still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.
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> >>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
> >>>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
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> >>>> I am going to upload a couple of pictures of the R-76 area if you want
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> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13584. Re: TR-4 repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 22:26:10 UTC
From: John Sehring
Topic: 13584 Message: 13584

>>I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
ve spent weeks just repairing screwed up mods and poor mechanical workmanship.

There are no "stupid" questions! The stupid thing is to not ask questions when there's help around!

You are bringing back to life a thoroughly abused piece of history and that's noble.

I assume you have another HF radio to talk on, so you're not completely dependant on the TR-4.

So take the pressure off of yourself. You are learning SO much in the process. And think of when it'll be done.

Remember that it's a hobby. And "amateur": means "for the love of it".

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

13585. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 22:27:37 UTC
From: Richard Knoppow
Topic: 13108 Message: 13585

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 06, 2013 2:18 PM
Subject: [DrakeRadio] Re: TR-4 Repair

I think the meter got fried along with the resistor. If
you dissect it you will probably find the insulation on the
coil has been cooked and expanded causing the meter to
stick. Probably not repairable.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

>
> Garey and Steve,
>
> Well its confirmed, my head is up the preverbal butt!
> Once again, I did not employ the tried and true KISS
> method. DIMM was bouncing around with voltage changes but
> S-meter was not. I pulled the meter, gently shook it and
> the needle did not move like they always do. I opened it
> up and somehow the vertical needle between the C cup
> appears to be "sticky". Didn't take time to futz with it
> but replaced it with one out of the junker. It now
> operates as expected once again. I have no clue how it
> worked and then got sticky. I'll let it run for a day or
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> what happens there.
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> never guessed that they could also stick.
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> Last trick is the carrier balance re-wire. I will attempt
> it this weekend, that's going to be a real hassle. Once
> all is working well, then I've got to undertake a cleanup.
> I don't know where this thing was stored, but the chassis
> has all kinds of crud on it.
>
> Thanks for all the help guys!!!
>
> Doug - N9XTF

>

13586. Re: [DrakeRadio] Re: TR-4 repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-06 23:30:34 UTC
From: Richard Knoppow
Topic: 13584 Message: 13586

----- Original Message -----
From: "John Sehring" <wb0eq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 06, 2013 3:26 PM
Subject: [DrakeRadio] Re: TR-4 repair

>>I apologize for all of the stupid questions, some or most
>>of this is above my head. Trying to learn as I go.
>>Frustration had gotten the better of me and was going to
>>send it off for repair but no one wants to touch it
>>because of the modifications by the previous owners. I
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ve spent weeks just repairing screwed up mods and poor
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I assume you have another HF radio to talk on, so you're not
completely dependant on the TR-4.

So take the pressure off of yourself. You are learning SO
much in the process. And think of when it'll be done.

Remember that it's a hobby. And "amateur": means "for the
love of it".

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

Amen, plus the rest of us are learning too. This is a
tough one, the lessons in the tough ones.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13587. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 00:48:28 UTC
From: Patrick Ross
Topic: 13543 Message: 13587

I have tested two small muffin fans atop the L4PS - 12V dc.
Temperature of bleeder resistors reduced from 135C to 30C!

Thank you all for your timely and helpful assistance. Much appreciated.

73, Pat
VE3CNX

From: "Abqcooks@..." <Abqcooks@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 5, 2013 2:00:50 PM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

For cooling fans on the top of the L4B itself I found what I think are ideal.
Google the Antec True Quiet 120
They are just the right size to sit over each of the 3-500s and are in fact super quiet. There's a dip switch to set for either 600 rpm or 1000 rpm. The 600 rpm setting moves plenty of air up out of the cabinet and makes almost zero noise. They have them at Amazon and Best Buy for 11 dollars....Staples for 15 dollars. Small price for what they do so quietly.
For the power supply I also found the cabinet to get pretty hot to the touch and so did like
Garey suggests with small nearly silent fans. The cabinet now stays cool to the touch.
I power the fans with walworts plugged into the power strip that I use as a power switch to turn on the T4XC. Anyway, try the Antec fans....you wont even know they are on.
73 Jim

-----Original Message-----
From: Patrick Ross <plrconsult@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, May 5, 2013 8:02 am
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Hi Gary:
Thank you for the prompt and informative response. I appreciate that.

I have done more research and testing with an infrared temperature sensor/readout and have determined that the source of the heat is the two (2) 50K 50W resistors which are inline when the amp is in the SSB mode (2500V).
The resistors get very hot (120 degrees C) even when the amp is in standby mode and the SSB switch is "on".
The transformer plates themselves are much cooler - about 30 C.

So, I will go through my junk box and install a fan or two on the PS just for insurance.

73, and tnx agn. Hope to meet you on the air.

Pat, VE3CNX

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 5, 2013 9:38:14 AM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Patrick -

You can never have too much air on tube gear, unless it blows the tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK), who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply, blowing UP!. It doesn't have to be a turbine, just enough (silent) to 'encourage' that hot air to keep on rising, and get it away from the area. I also put a fan on top of the L-4B,right over the tubes, same type, blowing up, for the same reason. The PS and the amp right over the tubeswill get too hot to comfortably hold your hand on. With the fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't youuse them?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm, notwithstanding that it out in the open and in a well ventilated area. I am concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX

>

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Yahoo! Groups Links

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13588. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 01:14:27 UTC
From: Garey Barrell
Topic: 13108 Message: 13588

Agreed!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, May 06, 2013 2:18 PM
> Subject: [DrakeRadio] Re: TR-4 Repair
>
> I think the meter got fried along with the resistor. If
> you dissect it you will probably find the insulation on the
> coil has been cooked and expanded causing the meter to
> stick. Probably not repairable.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>> Garey and Steve,
>>
>> Well its confirmed, my head is up the preverbal butt!
>> Once again, I did not employ the tried and true KISS
>> method. DIMM was bouncing around with voltage changes but
>> S-meter was not. I pulled the meter, gently shook it and
>> the needle did not move like they always do. I opened it
>> up and somehow the vertical needle between the C cup
>> appears to be "sticky". Didn't take time to futz with it
>> but replaced it with one out of the junker. It now
>> operates as expected once again. I have no clue how it
>> worked and then got sticky. I'll let it run for a day or
>> two and then I'll remove the extra electrolytic and see
>> what happens there.
>>
>> My TR-4Cw plate meter was like it was on a rubber band and
>> I had to replace it to get it to calm down. Would have
>> never guessed that they could also stick.
>>

>> Last trick is the carrier balance re-wire. I will attempt
>> it this weekend, that's going to be a real hassle. Once
>> all is working well, then I've got to undertake a cleanup.
>> I don't know where this thing was stored, but the chassis
>> has all kinds of crud on it.
>>
>> Thanks for all the help guys!!!
>>
>> Doug - N9XTF
>>
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> Yahoo! Groups Links
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13589. Re: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 01:16:49 UTC
From: Garey Barrell
Topic: 13543 Message: 13589

Cool! Literally.....

It takes very little air for dramatic results!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
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> VE3CNX
>
>
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> From: "Abqcooks@..." <Abqcooks@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, May 5, 2013 2:00:50 PM
> Subject: Re: [DrakeRadio] Drake L4B power supply temperature
>
>
>
>
> For cooling fans on the top of the L4B itself I found what I think are ideal.
> Google the Antec True Quiet 120
> They are just the right size to sit over each of the 3-500s and are in fact super quiet.
> There's a dip switch to set for either 600 rpm or 1000 rpm. The 600 rpm setting moves
> plenty of air up out of the cabinet and makes almost zero noise. They have them at Amazon
> and Best Buy for 11 dollars....Staples for 15 dollars. Small price for what they do so
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> Garey suggests with small nearly silent fans. The cabinet now stays cool to the touch.
> I power the fans with walworts plugged into the power strip that I use as a power switch
> to turn on the T4XC. Anyway, try the Antec fans....you wont even know they are on.
> 73 Jim
>
>
> -----Original Message-----

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> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sun, May 5, 2013 8:02 am
> Subject: Re: [DrakeRadio] Drake L4B power supply temperature
>
> Hi Gary:
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> I have done more research and testing with an infrared temperature
> sensor/readout and have determined that the source of the heat is the two (2)
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> The resistors get very hot (120 degrees C) even when the amp is in standby mode
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> The transformer plates themselves are much cooler - about 30 C.
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> insurance.
>
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>
> Pat, VE3CNX
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sunday, May 5, 2013 9:38:14 AM
> Subject: Re: [DrakeRadio] Drake L4B power supply temperature
>
>
> Patrick -
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> You can never have too much air on tube gear, unless it blows the
> tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK),
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> type, blowing up, for the same reason. The PS and the amp right over
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> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Supply under operating conditions - say full output on SSB for about 10 minutes?
>> I find that the case on the Power Supply HV transformer gets very warm,
> notwithstanding that it out in the open and in a well ventilated area. I am
> concerned about overheating due to lack of fan/integral cooling system.
>> Interested in your experience.
>>
>> Tnx, Patrick
>> VE3CNX
>>
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> Yahoo! Groups Links
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13590. Re: [DrakeRadio] Re microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 01:17:03 UTC
From: M K
Topic: 13582 Message: 13590

Naa.....use nails!

On Mon, May 6, 2013 at 5:50 PM, Dennis Weal <ky7hvh@gmx.us> wrote:

> **
>
>
> Woulda been quicker and easier to super glue the mic to the desk. ((*>*))
>
> Den
>
> I was so depressed last night thinking about the economy, wars,
> jobs, my savings, Social Security, retirement funds, etc., I called
> the Suicide Hotline. I got a call center in Pakistan, and when I
> told them I was suicidal, they got all excited, and asked if I
> could drive a truck.
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

13591. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 01:23:14 UTC
From: Garey Barrell
Topic: 13108 Message: 13591

Doug -

Are you making plans for all the projects you're going to have time
for now!?!?!?

I agree with Richard, thought the same thing. Eitherboiled the enamel
off the wire causing mechanical interference, shorted turns (most
likely,) or just roughed up the bearing (current goes through it) to
cause it to stick. Drake paid a little over $1 for those meters, so
give it a decent burial!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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slowcountry1 wrote:
> Garey and Steve,
>
> Well its confirmed, my head is up the preverbal butt! Once again, I did not employ the tried and true KISS method. DIMM was bouncing around with voltage changes but S-meter was not. I pulled the meter, gently shook it and the needle did not move like they always do. I opened it up and somehow the vertical needle between the C cup appears to be "sticky". Didn't take time to futz with it but replaced it with one out of the junker. It now operates as expected once again. I have no clue how it worked and then got sticky. I'll let it run for a day or two and then I'll remove the extra electrolytic and see what happens there.
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> My TR-4Cw plate meter was like it was on a rubber band and I had to replace it to get it to calm down. Would have never guessed that they could also stick.
>
> Last trick is the carrier balance re-wire. I will attempt it this weekend, that's going to be a real hassle. Once all is working well, then I've got to undertake a cleanup. I don't know where this thing was stored, but the chassis has all kinds of crud on it.
>
> Thanks for all the help guys!!!
>
> Doug - N9XTF
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> OK. Well look at 27000. The only difference at this point is that
>> there is no R163/C145D decoupling network, rest of the circuit is the
>> same. That tacked on electrolytic you spotted may be an 'update', by

>> the last guy in there.
>>
>> You can use the ohmmeter function of your DMM to check the movement.
>> Ohmmeter current is so low in DMMs you can measure direct.
>>
>> I was afraid of that. Repair guys don't want modified units, since as
>> you have found, you can spend hours trying to UNDO what some CB'er
>> thought was a good idea..... The customer isn't going to want to pay
>> for all those hours either! :-)
>>
>> On the other hand, it's a great learning experience, with the added
>> benefit that if you give up and part it out (absolute last resort) you
>> can still get your money out of it.
>>
>> Keep plugging, you'll get there!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> Garey,
>>>
>>> The rig serial number is 26095, I'm using schematic 26000. I'm not great at reading the schematics but have been trying to trace the circuit out. I have C145A, B and C; the three section cap not the 4 section in the later models.
>>>
>>> The S-Meter was very "bouncy" until frying the related resistors.
>>>
>>> I will put my voltmeter across the S-Meter and see what the voltage does.
>>>
>>> I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
>>> ve spent weeks just repairing screwed up mods and poor mechanical workmanship.
>>>
>>> Thanks,
>>>
>>> Doug N9XTF
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Doug -
>>>>
>>>> I'm working from schematic 27000, in the Versions directory on the
>>>> CD. I believe this is the correct schematic as the DUT s/n is 273xx?
>>>>

>>>> R163, R168 and R71 all come together on the + lead of C145D. + DC
>>>> voltage bus, should be +250 VDC or so.
>>>>
>>>> R70and the + meter terminal come together on the lead to the output
>>>> transformer and plate of V17.
>>>>
>>>> R71 and the -meter terminal come together with R53, R76 and the
>>>> secondary of T13.
>>>>
>>>> This compares the plate current of V17 to that of V11 and V15. The
>>>> bridge is balanced by way of the ZERO control with no input.
>>>>
>>>> In receive, AVC is applied to the Grids of V11 and V12, reducing the
>>>> current drawn by V11and causing the meter to increase. The more
>>>> signal, the more AVC, less current by V11, higher meter reading.
>>>>
>>>> In transmit, ALC voltage is applied to the Grid of V15, reducing the
>>>> current drawn and increasing the meter reading.
>>>>
>>>> Unless the meter itself is sluggish, (possible, it's NOT a quality
>>>> movement,) one of the devices above is the culprit. Connect a test
>>>> meter across the S-Meter and see if the voltage across it is coming up
>>>> slowly or quickly!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> slowcountry1 wrote:
>>>>> Garey,
>>>>>
>>>>> I removed R163 and R62 and they checked within tolerance. For smiles and grins, I checked R-55 it was 9.6K, I replaced it with 8.2K and R-51 was 10.4K, I replaced it with 8.2K. I checked these, even though they weren't in the circuit because they were close to R-71 that had burnt and I wanted to see if they had gotten hot and changed value.
>>>>>
>>>>> My schematic stops at R162 so I did not find it on the drawing. The S-Meter is still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.
>>>>>
>>>>> Replacing V5 with a 12BZ6 took care of the low S meter readings on 10,15 and 20M. I now have S9+10 or so. Again, I have to wait for the S-Meter to climb.
>>>>>

>>>>> Strong signals are not distorted at all on receive. I checked the voltages, on receive, of V13.
>>>>>
>>>>> 1. -.24VDC
>>>>> 2. -55.87VDC
>>>>> 3. -54.16
>>>>> 4.
>>>>> 5.
>>>>> 6. -1.29VDC
>>>>> 7. -55.7VDC Note DIMM kills receive when connected here
>>>>> 8. -52.3VDC
>>>>> 9. 6.14VAC
>>>>>
>>>>> I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.
>>>>>
>>>>> Thanks,
>>>>>
>>>>> Doug N9XTF
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> slowcountry1 wrote:
>>>>>>> Garey,
>>>>>>>
>>>>>>> This is where I am currently;
>>>>>>>
>>>>>>> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.
>>>>>> I have no idea what someone was doing messing around in this area. The
>>>>>> basic circuit and arrangement haven't changed since the first TR-4,
>>>>>> and perhaps even the TR-3! :-)
>>>>>>> Yesterday, I changed out T-1. I have now replaced all of the cans that relate to 10 meters. This did not make any change on the S-Meter during alignment. I aligned the rig as best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.
>>>>>>>
>>>>>>> Here are the problems that I have found;
>>>>>>>

>>>>>>> 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.
>>>>>> Make sure R163 is 100 ohms, may have increased due to overloading.
>>>>>> Make sure R62 is 33k ohms.
>>>>>>
>>>>>> 2. For the first time, I transmitted on the air yesterday. I
>>>>>> transmitted on all bands, 80 - 10 and received good audio reports. I
>>>>>> noticed that the S-Meter does not kick upscale with voice peaks as it
>>>>>> does on my TR-4Cw to indicate AGC activity. I swapped out the 12AX7
>>>>>> but no change.
>>>>>>
>>>>>> May be related to the slow response of the S-Meter, i.e., the just
>>>>>> can't respond fast enough to show.
>>>>>>
>>>>>>
>>>>>> 3. I have an underlying and highly annoying what appears to be an AC
>>>>>> hum from the speaker. I have no clue where the source of this is. I
>>>>>> tried the headphone jack and have it there as well.
>>>>>>
>>>>>> Recheck wiring and grounding of the preamp stage. Sounds like you may
>>>>>> have a ground loop.
>>>>>>
>>>>>> 4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested,
>>>>>> split in two and spread apart. I pulled the slug tuned L6 and L7 from
>>>>>> my parts rig and installed them. I tuned them per the TR-4C manual
>>>>>> however; I was only able to obtain 40 watt on transmit. I then hand
>>>>>> wound a new L7 and installed it. I was only able to obtain 65 watts on
>>>>>> transmit. I then reinstalled the molested one and transmit at an even
>>>>>> 100 watts. Is this coil actually supposed to be split and separated?
>>>>>> I've changed out just about every thing adjustable in this chain.
>>>>>>
>>>>>> L6 and L7 are to allow peaking in the upper segment of 10M. They are
>>>>>> essentially just a little more inductance on 10M as opposed to 10U for
>>>>>> T8 and T10, respectively. In production, the Mixer and RF stages were
>>>>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
>>>>>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
>>>>>> shifted a little one way or the other to result in fairly flat output
>>>>>> from 28 to 29 MHz.
>>>>>>
>>>>>> Transmit into a dummy load produces; 28.8 110Watts 28.4 130watts 21.35
>>>>>> 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is
>>>>>> neutralized on 10M and all bands appear to produce max power at plate
>>>>>> dip.
>>>>>>
>>>>>> Your output readings indicate soft PA tubes. Normal output is 200W on
>>>>>> 80, 40 and 20M, 175W on 15M and 150W on 10M.
>>>>>>
>>>>>> The calibration signal does not appear to produce the signal strength
>>>>>> that It should on 10M and 15M but it appears that when hooked to an

>>>>>> antenna the rig receives as good or a tad better than my TR-4Cw does.
>>>>>>
>>>>>> Sounds more like a Calibrator problem than a receiver one. Try a
>>>>>> 12BZ6 in V5.
>>>>>>
>>>>>> I do not know how the AGC is supposed to work but it seems to me that
>>>>>> there might be something wrong with the AGC on transmit and receive?
>>>>>> It would be nice if the S-meter functioned as it should but If it
>>>>>> cannot be fixed I can live without it. I have a feeling it points to
>>>>>> other problems though.
>>>>>>
>>>>>> The S-Meter (indicating AVC action) should kick up quickly, and then
>>>>>> drop slowly when the signal stops. Check the voltages around V13a,
>>>>>> which is the AVC amp. Again, I think the problem is more related to
>>>>>> the meter than to the AVC circuitry. Does the receiver sound like the
>>>>>> AVC is working correctly, e.g., little or no distortion on strong signals?
>>>>>>
>>>>>> The background hum, while my brain tunes it out after an hour or so,
>>>>>> really needs to go. Remember that I installed the TR-4 audio board out
>>>>>> of my parts rig. This hum was not present, to the best of my
>>>>>> recollection until the S-Meter related resistors burnt. All grounds
>>>>>> have been checked and double checked as well as the chassis screws.
>>>>>>
>>>>>> Make sure the B+ for the Preamp stage is coming from the correct +150V
>>>>>> supply.
>>>>>>
>>>>>> I am going to upload a couple of pictures of the R-76 area if you want
>>>>>> to look at them.
>>>>>>
>>>>>> I have no idea what he was trying to do in there. Looks almost like
>>>>>> he was trying to get the DSB signal out of the BAL MOD and take it to
>>>>>> another mixer?? All I can recommend is doing your best to duplicate
>>>>>> what the schematic and other references show.
>>>>>>
>>>>>>
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>>> Yahoo! Groups Links
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> Yahoo! Groups Links

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13592. Re: [DrakeRadio] Re microphone plug

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 01:22:37 UTC
From: Jim Shorney
Topic: 13582 Message: 13592

Duct tape.

On Mon, 6 May 2013 21:17:03 -0400, M K wrote:

>Naa.....use nails!
>
>On Mon, May 6, 2013 at 5:50 PM, Dennis Weal <ky7hvh@...> wrote:
>
>> **
>>
>>
>> Woulda been quicker and easier to super glue the mic to the desk. ((*>*))
>>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13593. RE: [DrakeRadio] Drake L4B power supply temperature

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 02:50:36 UTC
From: Greg Schultz Sr
Topic: 13543 Message: 13593

I have the L7 amp and the PS has the same arrangement to create bias. Mine shorted to ground and took out a couple of diodes. I rebuilt the PS putting in a new rectifier board and caps from Harbach and eliminated those resistors. I now generate bias with a 50v zener diode inside the amp itself. Those resistors are a disaster waiting to happen.

Greg W5RY

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Patrick Ross
Sent: Sunday, May 05, 2013 9:03 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Hi Gary:
Thank you for the prompt and informative response. I appreciate that.

I have done more research and testing with an infrared temperature sensor/readout and have determined that the source of the heat is the two (2) 50K 50W resistors which are inline when the amp is in the SSB mode (2500V).
The resistors get very hot (120 degrees C) even when the amp is in standby mode and the SSB switch is "on".
The transformer plates themselves are much cooler - about 30 C.

So, I will go through my junk box and install a fan or two on the PS just for insurance.

73, and tnx agn. Hope to meet you on the air.

Pat, VE3CNX

From: Garey Barrell <k4oah@... <mailto:k4oah%40mindspring.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Sunday, May 5, 2013 9:38:14 AM
Subject: Re: [DrakeRadio] Drake L4B power supply temperature

Patrick -

You can never have too much air on tube gear, unless it blows the tube(s) out of the socket(s). I think it was Bill Orr, W6SAI (SK), who said that. If not it was one of his buddies at Eimac!

I run a 4" 'BOX' type fan just lying on top of the power supply, blowing UP!. It doesn't have to be a turbine, just enough (silent) to 'encourage' that hot air to keep on rising, and get it away from the area. I also put a fan on top of the L-4B,right over the tubes, same type, blowing up, for the same reason. The PS and the amp right over the tubeswill get too hot to comfortably hold your hand on. With the fan(s) it's near room temperature.

Bottom line, both will work for a long time without the fans. Fans are
cheap, especially 220 or 24V fans on 120 or 12V, so why wouldn't
youuse them?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Patrick Ross wrote:
>
>
>
> I recently acquired a Drake L4B complete with matching Power Supply fitted with the Harbach board mod.
>
> My question is, what is the acceptable "normal" temperature for the Power Supply under operating conditions - say full output on SSB for about 10 minutes?
>
> I find that the case on the Power Supply HV transformer gets very warm, notwithstanding that it out in the open and in a well ventilated area. I am concerned about overheating due to lack of fan/integral cooling system.
>
> Interested in your experience.
>
> Tnx, Patrick
> VE3CNX
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13594. R-4 Parts For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 11:08:10 UTC
From: Eddy Swynar
Topic: 13594 Message: 13594

Hi Guys,

I just spotted this ad on the Ontario Swap Shop web site, which might interest the few just-plain-Jane R-4 receiver owners that are out there...!

Please note: the usual dis-claimers apply.

~73~ de Eddy VE3CUI - VE3XZ

Gaetan VE3AZQ [613-212-1365] in cornwall ON has listed the following (05-05-2013 14:25:33):

For Sale (last updated 05-05-2013, listed 04-04-2013)
Manufacturer: DRAKE
Model: R 4
Drake R4 receiver Parts.
Tubes set 30.00 free shipping
Transfo 30.00 free shipping
Meter 25.00 free shipping
Many other parts avalaible.

[Non-text portions of this message have been removed]

13595. Re: [DrakeRadio] CD-For SPR4 REpairs & Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 14:00:18 UTC
From: Garey Barrell
Topic: 13560 Message: 13595

Terry -

Here you go!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Hey, Garey -
>
>
>
> I'd like to have a scan of the schematic for my SPR-4, too.
> Do you charge for that? If so, no problem - your other CD's have been very
> valuable to me, and I'd like to be able to have a larger schematic for my
> SPR-4.
>
>
>
> 73,
>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of Garey Barrell
> Sent: Monday, May 06, 2013 9:12 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] CD-For SPR4 REpairs & Maintenance
>
>
>
>
>
>
> Andy -
>
> Sorry, I don't have a CD for the the SPR-4.
>
> I DO have a high quality scan of the manual and schematic. I've

> reworked the schematic so it can be blown up to 3' x 4' on a large
> format printer, if you have a business center of some sort. Or of
> course it can be blown up on screen and partial sections enlarged for
> printing on 8.5 x 11 paper.
>
> Themanual has drawings of the pc boards with parts identified, and of
> course can also be blown up on the computer
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> andylingham29 wrote:
>> Does anybody have or know of a CD rom created for the SPR4, as I am keen
> to restore this fine but deaf receiver.? I have a circuit diagram but my
> failing eyesight makes it difficult to decipher the fine print. 73s de Andy
> 9M2PV.
>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13596. Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 16:31:26 UTC
From: slowcountry1
Topic: 13108 Message: 13596

What is the resistance supposed to be as measured across the movement? If the windings aren't shot, I'd like to try to make it work; I don't have another spare for future projects and I'm sure these are unobtanium.

I still have work to do to the unit, ie T-14 rewire, troubleshoot hum and cleanup however; I might actually get some radio time now. Or it would be nice to think so.

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Are you making plans for all the projects you're going to have time
> for now!?!?!?
>
> I agree with Richard, thought the same thing. Eitherboiled the enamel
> off the wire causing mechanical interference, shorted turns (most
> likely,) or just roughed up the bearing (current goes through it) to
> cause it to stick. Drake paid a little over $1 for those meters, so
> give it a decent burial!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > Garey and Steve,
> >
> > Well its confirmed, my head is up the preverbal butt! Once again, I did not employ the tried and true KISS method. DIMM was bouncing around with voltage changes but S-meter was not. I pulled the meter, gently shook it and the needle did not move like they always do. I opened it up and somehow the vertical needle between the C cup appears to be "sticky". Didn't take time to futz with it but replaced it with one out of the junker. It now operates as expected once again. I have no clue how it worked and then got sticky. I'll let it run for a day or two and then I'll remove the extra electrolytic and see what happens there.
> >
> > My TR-4Cw plate meter was like it was on a rubber band and I had to replace it to get it to calm down. Would have never guessed that they could also stick.
> >
> > Last trick is the carrier balance re-wire. I will attempt it this weekend, that's going to be a real hassle. Once all is working well, then I've got to undertake a cleanup. I

don't know where this thing was stored, but the chassis has all kinds of crud on it.
> >
> > Thanks for all the help guys!!!
> >
> > Doug - N9XTF
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> OK. Well look at 27000. The only difference at this point is that
> >> there is no R163/C145D decoupling network, rest of the circuit is the
> >> same. That tacked on electrolytic you spotted may be an 'update', by
> >> the last guy in there.
> >>
> >> You can use the ohmmeter function of your DMM to check the movement.
> >> Ohmmeter current is so low in DMMs you can measure direct.
> >>
> >> I was afraid of that. Repair guys don't want modified units, since as
> >> you have found, you can spend hours trying to UNDO what some CB'er
> >> thought was a good idea..... The customer isn't going to want to pay
> >> for all those hours either! :-)
> >>
> >> On the other hand, it's a great learning experience, with the added
> >> benefit that if you give up and part it out (absolute last resort) you
> >> can still get your money out of it.
> >>
> >> Keep plugging, you'll get there!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> slowcountry1 wrote:
> >>> Garey,
> >>>
> >>> The rig serial number is 26095, I'm using schematic 26000. I'm not great at reading the schematics but have been trying to trace the circuit out. I have C145A, B and C; the three section cap not the 4 section in the later models.
> >>>
> >>> The S-Meter was very "bouncy" until frying the related resistors.
> >>>
> >>> I will put my voltmeter across the S-Meter and see what the voltage does.
> >>>
> >>> I apologize for all of the stupid questions, some or most of this is above my head. Trying to learn as I go. Frustration had gotten the better of me and was going to send it off for repair but no one wants to touch it because of the modifications by the previous owners. I suspect a repair shop would cost well more than the rig's worth. I'
> >>> ve spent weeks just repairing screwed up mods and poor mechanical workmanship.
> >>>

> >>> Thanks,
> >>>
> >>> Doug N9XTF
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Doug -
> >>>>
> >>>> I'm working from schematic 27000, in the Versions directory on the
> >>>> CD. I believe this is the correct schematic as the DUT s/n is 273xx?
> >>>>
> >>>> R163, R168 and R71 all come together on the + lead of C145D. + DC
> >>>> voltage bus, should be +250 VDC or so.
> >>>>
> >>>> R70and the + meter terminal come together on the lead to the output
> >>>> transformer and plate of V17.
> >>>>
> >>>> R71 and the -meter terminal come together with R53, R76 and the
> >>>> secondary of T13.
> >>>>
> >>>> This compares the plate current of V17 to that of V11 and V15. The
> >>>> bridge is balanced by way of the ZERO control with no input.
> >>>>
> >>>> In receive, AVC is applied to the Grids of V11 and V12, reducing the
> >>>> current drawn by V11and causing the meter to increase. The more
> >>>> signal, the more AVC, less current by V11, higher meter reading.
> >>>>
> >>>> In transmit, ALC voltage is applied to the Grid of V15, reducing the
> >>>> current drawn and increasing the meter reading.
> >>>>
> >>>> Unless the meter itself is sluggish, (possible, it's NOT a quality
> >>>> movement,) one of the devices above is the culprit. Connect a test
> >>>> meter across the S-Meter and see if the voltage across it is coming up
> >>>> slowly or quickly!
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> slowcountry1 wrote:
> >>>>> Garey,
> >>>>>
> >>>>> I removed R163 and R62 and they checked within tolerance. For smiles and grins, I
checked R-55 it was 9.6K, I replaced it with 8.2K and R-51 was 10.4K, I replaced it with
8.2K. I checked these, even though they weren't in the circuit because they were close to
R-71 that had burnt and I wanted to see if they had gotten hot and changed value.
> >>>>>
> >>>>> My schematic stops at R162 so I did not find it on the drawing. The S-Meter is

still very sluggish, takes a second or two to climb, even when adjusting the zero POT. I'm not finding anything else suspicious. There is an old 20uF electrolytic connected to C145A that goes over to a terminal (appears to be user added) and from that terminal to Board 2 at R163. I do not see this on the schematic. If I remove it and connect the wire directly to C145A the S-Meter rests at low scale and the zero pot has no effect, it will not move upscale.
> >>>>>
> >>>>> Replacing V5 with a 12BZ6 took care of the low S meter readings on 10,15 and 20M. I now have S9+10 or so. Again, I have to wait for the S-Meter to climb.
> >>>>>
> >>>>> Strong signals are not distorted at all on receive. I checked the voltages, on receive, of V13.
> >>>>>
> >>>>> 1. -.24VDC
> >>>>> 2. -55.87VDC
> >>>>> 3. -54.16
> >>>>> 4.
> >>>>> 5.
> >>>>> 6. -1.29VDC
> >>>>> 7. -55.7VDC Note DIMM kills receive when connected here
> >>>>> 8. -52.3VDC
> >>>>> 9. 6.14VAC
> >>>>>
> >>>>> I have not found the source of the hum yet and have not had the time to dedicate to replacing and rewiring T-14. This is going to be a tedious, time consuming job.
> >>>>>
> >>>>> Thanks,
> >>>>>
> >>>>> Doug N9XTF
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> slowcountry1 wrote:
> >>>>>>> Garey,
> >>>>>>>
> >>>>>>> This is where I am currently;
> >>>>>>>
> >>>>>>> Regarding T-14 and the associated wiring; yes, I have looked at the CD and its evident that the wiring around this area is completely different. My unit is different than the one shown in the picture; 3 section cap instead of 4 and several other noticeable differences. I did not want to muck around in the area of T-14 and start changing things until someone verified that all TR-4's TR-4Cw rigs were the same in this area. If they are the same, I can wire it using one of my TR-4Cw rigs as a 'road map'. Someone changed out R-76 and the shielded cable that, on my TR-4Cw's that connect to it inside the carrier oscillator partition, the shielded cable is outside the partition on the opposite end of the resistor. T-15 has been molested but I did not want to remove it yet as its difficult to get at. From Pin 7 of V15 there is a mica cap that goes to board 9 and then to ground and some other changes. I'm leary of changing things here as I have no clue what they were trying to accomplish.
> >>>>>> I have no idea what someone was doing messing around in this area. The
> >>>>>> basic circuit and arrangement haven't changed since the first TR-4,
> >>>>>> and perhaps even the TR-3! :-)

> >>>>>>> Yesterday, I changed out T-1. I have now replaced all of the cans that relate to 10 meters. This did not make any change on the S-Meter during alignment. I aligned the rig as best I could. Now, I put this TR-4 side by side with my TR-4Cw on similar antennas. I now hear weak signals on the TR-4 and some of them are stronger on the TR-4 than my unmolested TR-4Cw. The S-meter readings on the TR-4 are the same or an S-Unit higher depending on the signal.
> >>>>>>>
> >>>>>>> Here are the problems that I have found;
> >>>>>>>
> >>>>>>> 1. After replacing the burnt resistors surrounding the S-meter circuit, on receive the S-Meter has a significant delay. It rises slowly to match the signal strength and then when the signal is gone it slowly goes back to S1.
> >>>>>> Make sure R163 is 100 ohms, may have increased due to overloading.
> >>>>>> Make sure R62 is 33k ohms.
> >>>>>>
> >>>>>> 2. For the first time, I transmitted on the air yesterday. I
> >>>>>> transmitted on all bands, 80 - 10 and received good audio reports. I
> >>>>>> noticed that the S-Meter does not kick upscale with voice peaks as it
> >>>>>> does on my TR-4Cw to indicate AGC activity. I swapped out the 12AX7
> >>>>>> but no change.
> >>>>>>
> >>>>>> May be related to the slow response of the S-Meter, i.e., the just
> >>>>>> can't respond fast enough to show.
> >>>>>>
> >>>>>>
> >>>>>> 3. I have an underlying and highly annoying what appears to be an AC
> >>>>>> hum from the speaker. I have no clue where the source of this is. I
> >>>>>> tried the headphone jack and have it there as well.
> >>>>>>
> >>>>>> Recheck wiring and grounding of the preamp stage. Sounds like you may
> >>>>>> have a ground loop.
> >>>>>>
> >>>>>> 4. L6 and L7 on my TR-4 are air wound, no slug. L7 has been molested,
> >>>>>> split in two and spread apart. I pulled the slug tuned L6 and L7 from
> >>>>>> my parts rig and installed them. I tuned them per the TR-4C manual
> >>>>>> however; I was only able to obtain 40 watt on transmit. I then hand
> >>>>>> wound a new L7 and installed it. I was only able to obtain 65 watts on
> >>>>>> transmit. I then reinstalled the molested one and transmit at an even
> >>>>>> 100 watts. Is this coil actually supposed to be split and separated?
> >>>>>> I've changed out just about every thing adjustable in this chain.
> >>>>>>
> >>>>>> L6 and L7 are to allow peaking in the upper segment of 10M. They are
> >>>>>> essentially just a little more inductance on 10M as opposed to 10U for
> >>>>>> T8 and T10, respectively. In production, the Mixer and RF stages were
> >>>>>> peaked at 28.8 MHz, then switch to 10M and 28.3 MHz and adjust L6 and
> >>>>>> L7 for maximum. Sometimes that 10M adjustment frequency has to be
> >>>>>> shifted a little one way or the other to result in fairly flat output
> >>>>>> from 28 to 29 MHz.
> >>>>>>
> >>>>>> Transmit into a dummy load produces; 28.8 110Watts 28.4 130watts 21.35

> >>>>>> 100watts 14.3 140watts 7.3 195watts 3.8 200watts The unit is
> >>>>>> neutralized on 10M and all bands appear to produce max power at plate
> >>>>>> dip.
> >>>>>>
> >>>>>> Your output readings indicate soft PA tubes. Normal output is 200W on
> >>>>>> 80, 40 and 20M, 175W on 15M and 150W on 10M.
> >>>>>>
> >>>>>> The calibration signal does not appear to produce the signal strength
> >>>>>> that It should on 10M and 15M but it appears that when hooked to an
> >>>>>> antenna the rig receives as good or a tad better than my TR-4Cw does.
> >>>>>>
> >>>>>> Sounds more like a Calibrator problem than a receiver one. Try a
> >>>>>> 12BZ6 in V5.
> >>>>>>
> >>>>>> I do not know how the AGC is supposed to work but it seems to me that
> >>>>>> there might be something wrong with the AGC on transmit and receive?
> >>>>>> It would be nice if the S-meter functioned as it should but If it
> >>>>>> cannot be fixed I can live without it. I have a feeling it points to
> >>>>>> other problems though.
> >>>>>>
> >>>>>> The S-Meter (indicating AVC action) should kick up quickly, and then
> >>>>>> drop slowly when the signal stops. Check the voltages around V13a,
> >>>>>> which is the AVC amp. Again, I think the problem is more related to
> >>>>>> the meter than to the AVC circuitry. Does the receiver sound like the
> >>>>>> AVC is working correctly, e.g., little or no distortion on strong signals?
> >>>>>>
> >>>>>> The background hum, while my brain tunes it out after an hour or so,
> >>>>>> really needs to go. Remember that I installed the TR-4 audio board out
> >>>>>> of my parts rig. This hum was not present, to the best of my
> >>>>>> recollection until the S-Meter related resistors burnt. All grounds
> >>>>>> have been checked and double checked as well as the chassis screws.
> >>>>>>
> >>>>>> Make sure the B+ for the Preamp stage is coming from the correct +150V
> >>>>>> supply.
> >>>>>>
> >>>>>> I am going to upload a couple of pictures of the R-76 area if you want
> >>>>>> to look at them.
> >>>>>>
> >>>>>> I have no idea what he was trying to do in there. Looks almost like
> >>>>>> he was trying to get the DSB signal out of the BAL MOD and take it to
> >>>>>> another mixer?? All I can recommend is doing your best to duplicate
> >>>>>> what the schematic and other references show.
> >>>>>>
> >>>>>>
> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
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13597. Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 16:34:24 UTC
From: slowcountry1
Topic: 13597 Message: 13597

All,

I see that it appears that some respond directly to the group via e-mail. I tried to respond to a post via my e-mail client however; it does not show up on the group. Is this as simple as "Reply" in the e-mail client or is there some other procedure for doing this?

Thanks,

Doug N9XTF

13598. Transmitter loading when changing frequencies

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 16:43:54 UTC
From: slowcountry1
Topic: 13598 Message: 13598

I'm sure this has been covered many many times however; I have a question regarding changing frequencies (within the same band) and transmitter tuning.

Its obvious that it will depend on the band, SWR changes over a given frequency range etc; is there a rule of thumb how far one can change frequency before the rig needs to be retuned?

I always completely retune the rig when I make a frequency change; I'm sure this is unnecessary stress on the tubes etc. Should one just re-dip the plate and touch up the load cap if necessary or what's the best procedure to follow?

Thanks,

Doug - N9XTF

13599. Re: [DrakeRadio] Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 16:55:43 UTC
From: Doug Smith
Topic: 13597 Message: 13599

I just hit "Reply" and the email comes up addressed to the group.
If I hit "Reply All" the email comes up addressed to the group and a CC:
is sent to the original poster.

I'm using Thunderbird, FWIW.

73,
Doug, W7KF
http://www.w7kf.com

On 05/07/2013 10:34 AM, slowcountry1 wrote:
> All,
>
> I see that it appears that some respond directly to the group via
> e-mail. I tried to respond to a post via my e-mail client however; it
> does not show up on the group. Is this as simple as "Reply" in the
> e-mail client or is there some other procedure for doing this?
>
> Thanks,
>
> Doug N9XTF

13600. What is the earliest R4 RX that will work with my TX4C TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 16:57:11 UTC
From: wb2kki
Topic: 13600 Message: 13600

What is the earliest R4 RX that will work with my TX4C TX as a twin?

Thanks!

Mike

WB2KKI

13601. Re: [DrakeRadio] Transmitter loading when changing frequencies

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:04:47 UTC
From: Doug Smith
Topic: 13598 Message: 13601

My antennas are all pretty flat (SWR-wise; not flat on the ground) and
I'm not terribly finicky. So, if I move 10 or 20 KHz I don't always
retune. If I move much further I will re-dip the plate and maybe touch
up the pre-selector on the receiver.

OTOH, if I do move and plan to stay for a while (long winded rag chew)
then I re-dip even if the move was small.

Oh, and when I say "re-dip" what I really mean is that I re-peak the
power output using the Plate control. I find that procedure to be more
accurate than looking for a broad dip. It's usually not much of a change..

Been running the same finals for all of this century and a good portion
of the last..

73,
Doug, W7KF
http://www.w7kf.com

On 05/07/2013 10:43 AM, slowcountry1 wrote:
> I'm sure this has been covered many many times however; I have a
> question regarding changing frequencies (within the same band) and
> transmitter tuning.
>
> Its obvious that it will depend on the band, SWR changes over a given
> frequency range etc; is there a rule of thumb how far one can change
> frequency before the rig needs to be retuned?
>
> I always completely retune the rig when I make a frequency change; I'm
> sure this is unnecessary stress on the tubes etc. Should one just re-dip
> the plate and touch up the load cap if necessary or what's the best
> procedure to follow?
>
> Thanks,
>
> Doug - N9XTF

13602. Re: [DrakeRadio] Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:06:28 UTC
From: Garey Barrell
Topic: 13597 Message: 13602

Doug -

Not sure what you're asking......

Most email clients "REPLY" to the sender, which in this case sends
only to the list. "REPLY ALL" in 'some' clients will reply to the
list and to any other Send To addresses.

An email to me from the list shows the originators email in the 'From'
field, and DrakeRadio in the 'Reply-to' field.

It sounds like your client shows the originator in the Reply-to field.

What is your client? Perhaps someone using the same can answer
better.......

??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> All,
>
> I see that it appears that some respond directly to the group via e-mail. I tried to respond to a post via my e-mail client however; it does not show up on the group. Is this as simple as "Reply" in the e-mail client or is there some other procedure for doing this?
>
> Thanks,
>
> Doug N9XTF
>
>

13603. Re: [DrakeRadio] What is the earliest R4 RX that will work with my TX4C TX

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:11:34 UTC
From: Garey Barrell
Topic: 13600 Message: 13603

Mike -

ANY R4 receiver will transceive with the T-4XC. For proper transceive,
you'll have to dothe Transceive Align procedure from the T-4XC manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

wb2kki wrote:
> What is the earliest R4 RX that will work with my TX4C TX as a twin?
>
>
>
> Thanks!
>
> Mike
>
> WB2KKI
>

13604. Re: [DrakeRadio] Transmitter loading when changing frequencies

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:20:57 UTC
From: Garey Barrell
Topic: 13598 Message: 13604

Doug -

All you have to do is 'dip the plate' ANY time you move overa few kHz. You can NEVER harm anything by dipping the plate!!! It IS frequency dependent, the low bands allow very few kHz before re-dipping, and upper bands allow more. Generally if the plate current increases when you move, it needs to be re-dipped. If you're dithering around chasing a DX station in a pile-up, it's not a big deal, since we're talking transmissions of a fewseconds at most.

Rule #1- Dipping the plateshould ALWAYS be the first and last thing you do any time you tune the transmitter.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> I'm sure this has been covered many many times however; I have a question regarding changing frequencies (within the same band) and transmitter tuning.
>
> Its obvious that it will depend on the band, SWR changes over a given frequency range etc; is there a rule of thumb how far one can change frequency before the rig needs to be retuned?
>
> I always completely retune the rig when I make a frequency change; I'm sure this is unnecessary stress on the tubes etc. Should one just re-dip the plate and touch up the load cap if necessary or what's the best procedure to follow?
>
> Thanks,
>
> Doug - N9XTF
>
>
>

13605. Re: Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:22:38 UTC
From: slowcountry1
Topic: 13597 Message: 13605

I use Outlook 2007 and the mail client on my Iphone. If I click reply all, on either client, it puts the original contact (Gary Barrel) in the To field and ...Yahoo groups in the CC field. If I send the email from either, it does not show up on the group.

From what I read here, this should work. I will have to investigate why it is not forwarded to the group. I always have to login to the group and post from the web. It can get quite tedious surfing though long postings.

Thanks,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> Not sure what you're asking......
>
> Most email clients "REPLY" to the sender, which in this case sends
> only to the list. "REPLY ALL" in 'some' clients will reply to the
> list and to any other Send To addresses.
>
> An email to me from the list shows the originators email in the 'From'
> field, and DrakeRadio in the 'Reply-to' field.
>
> It sounds like your client shows the originator in the Reply-to field.
>
> What is your client? Perhaps someone using the same can answer
> better.......
>
> ??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > All,
> >
> > I see that it appears that some respond directly to the group via e-mail. I tried to respond to a post via my e-mail client however; it does not show up on the group. Is this as simple as "Reply" in the e-mail client or is there some other procedure for doing this?
> >

> > Thanks,
> >
> > Doug N9XTF
> >
> >
>

13606. Re: [DrakeRadio] Re: Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:42:25 UTC
From: Garey Barrell
Topic: 13597 Message: 13606

Doug -

Is your email addressthe same on both units? CC should work just fine.

I use SeaMonkey (Mozilla/Thunderbird) and if I hit REPLY -or- REPLY
ALL it goes only to the group.

If there are any CC: addresses in the original message, they are
included in the REPLY ALL address.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> I use Outlook 2007 and the mail client on my Iphone. If I click reply all, on either client, it puts the original contact (Gary Barrel) in the To field and ...Yahoo groups in the CC field. If I send the email from either, it does not show up on the group.
>
> >From what I read here, this should work. I will have to investigate why it is not forwarded to the group. I always have to login to the group and post from the web. It can get quite tedious surfing though long postings.
>
> Thanks,
>
> Doug N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> Not sure what you're asking......
>>
>> Most email clients "REPLY" to the sender, which in this case sends
>> only to the list. "REPLY ALL" in 'some' clients will reply to the
>> list and to any other Send To addresses.
>>
>> An email to me from the list shows the originators email in the 'From'
>> field, and DrakeRadio in the 'Reply-to' field.
>>
>> It sounds like your client shows the originator in the Reply-to field.
>>
>> What is your client? Perhaps someone using the same can answer
>> better.......

>>
>> ??
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> All,
>>>
>>> I see that it appears that some respond directly to the group via e-mail. I tried to respond to a post via my e-mail client however; it does not show up on the group. Is this as simple as "Reply" in the e-mail client or is there some other procedure for doing this?
>>>
>>> Thanks,
>>>
>>> Doug N9XTF
>>>
>>>
>
>
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> ------------------------------------
>
> Yahoo! Groups Links
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13607. Re: [DrakeRadio] Transmitter loading when changing frequencies

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:42:21 UTC
From: Mark Pilant
Topic: 13598 Message: 13607

Hi Garey.

> Generally if the plate current increases when you move,
> it needs to be re-dipped.

This bring up a question I've had for a while but never asked.
Which will show how little I've used hollow state transmitters.
(Although I've been playing around with electronics long
enough to remember when the CK-722 was the hot new thing :-)

Anyway...

When I use my TR-3 or TR-4 to transmit, I usually tune up into
a dummy load to get the Plate and Load settings close. For me,
this works because my antenna has a pretty flat SWR across the
bands I use.

So my question is should I be adjusting the Plate and Load
controls once I start transmitting on the antenna instead of the
dummy load?

Thanks in advance.

73

- Mark N1VQW

13608. Re: [DrakeRadio] Re: Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 17:49:12 UTC
From: Doug
Topic: 13597 Message: 13608

Ok I found that this particular email account was not forwarding any of my emails. The sent folder was locked up on the server. I should have checked there first.

Thanks all,

Doug -N9XTF

Sent from my iPhone

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

13609. Re: [DrakeRadio] Transmitter loading when changing frequencies

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 18:06:32 UTC
From: Garey Barrell
Topic: 13598 Message: 13609

Mark -

Absolutely! IF boththe dummy and antenna were exactly 50 ohms and j0,
no change would benecessary. BUT, it just ain't that way. :-)

BOTH units vary 'slightly' from perfect, and tuning and loading are
'matching' the transmitter output stage to that _impedance_.
Impedance is resistance that is frequency dependent.

The advantage of a dummy load is primarily tilted toward your
neighbors! A dummy load is also a good testing device, since unless
it's been damaged, it's relatively unchanged over a fairly wide
frequency range. An antenna however, is ONLY 'perfect' at ONE
frequency. Either side of 'perfect' the SWR increases slightly at
first and more rapidly as you move further from it's 'resonant' frequency.

So initial tune-up into a dummy load protects your Ham neighbors while
you TUNE and LOAD and PEAK and DIP, etc. until you get it right. IF
your antenna is truly matched at that frequency, switching to the
antenna should only require a very slight adjustment to the PLATE
control for dip. The better the antenna match, the smaller the PLATE
controlmovement. I would expect 'some' adjustment, however slight,
between any dummy load and any antenna.

Again, the first and LAST thing you do is dip the PLATE.!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> Hi Garey.
>
> > Generally if the plate current increases when you move,
> > it needs to be re-dipped.
>
> This bring up a question I've had for a while but never asked.
> Which will show how little I've used hollow state transmitters.
> (Although I've been playing around with electronics long
> enough to remember when the CK-722 was the hot new thing :-)
>
> Anyway...
>
> When I use my TR-3 or TR-4 to transmit, I usually tune up into

> a dummy load to get the Plate and Load settings close. For me,
> this works because my antenna has a pretty flat SWR across the
> bands I use.
>
> So my question is should I be adjusting the Plate and Load
> controls once I start transmitting on the antenna instead of the
> dummy load?
>
> Thanks in advance.
>
> 73
>
> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

13610. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:03:37 UTC
From: Richard Knoppow
Topic: 13108 Message: 13610

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, May 07, 2013 9:31 AM
Subject: [DrakeRadio] Re: TR-4 Repair

> What is the resistance supposed to be as measured across
> the movement? If the windings aren't shot, I'd like to
> try to make it work; I don't have another spare for future
> projects and I'm sure these are unobtanium.
>
> I still have work to do to the unit, ie T-14 rewire,
> troubleshoot hum and cleanup however; I might actually get
> some radio time now. Or it would be nice to think so.
>
> Doug - N9XTF

If it were my meter I would try to repair it. Since it responds at all it appears to be a mechanical problem not electrical. The coil is not open. I don't know how to get these meters open, someone else here may know. If you can get it open you may be able to see what has happened. If there is anything loose in the gap try blowing it out using a hand syrenge rather than canned air, you don't want too much pressure. Even just blowing with your mouth may work. If that frees it up your home. If the insulation on the wire has boiled and expanded it may be more difficult but you may be able to free it by using some very fine sandpaper in the gap to sand off just enough to get clearance. I doubt if its a bearing but it may by that the meter got slammed so hard that it knocked a bearing loose. If so you will be able to see it and probably be able push the pin back where it belongs, I am very doubtful this is the problem but should be looked for. Small particles of anything but particularly magnetic material can be removed from the gap with Scotch tape.
I have had some success with repairing meters. It takes a delicate touch and one must be very careful not to do additional damage such as bending pointers. It is certainly worth a try.
Depending on your eyesight a couple of pairs of drugstore reading glasses of various strengths may be helpful or one of those goose neck illuminated magnifiers. It also helpful to have some non-magnetic fine tweezers.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13611. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:19:01 UTC
From: Doug
Topic: 13108 Message: 13611

Richard,

I opened it up. It's the same as the plate meter I tried to repair. The coil is dark and has a burnt smell to it. It measures like 180 ohm or something. I forget exactly what I measured. I have a feeling the sticky is between the vertical pin and the C cup. I can push the pointer to the right and it ever so slowly returns. I didn't see any obstruction elsewhere. Again, this was a quick inspection.

Without know what the resistance is supposed to be, I'm almost afraid to make it work and then fry the circuit in another rig if and when I need it.

Sent from my iPhone

On May 7, 2013, at 15:03, "Richard Knoppow" <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "slowcountry1" <dcoffman@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, May 07, 2013 9:31 AM
> Subject: [DrakeRadio] Re: TR-4 Repair
>
> > What is the resistance supposed to be as measured across
> > the movement? If the windings aren't shot, I'd like to
> > try to make it work; I don't have another spare for future
> > projects and I'm sure these are unobtanium.
> >
> > I still have work to do to the unit, ie T-14 rewire,
> > troubleshoot hum and cleanup however; I might actually get
> > some radio time now. Or it would be nice to think so.
> >
> > Doug - N9XTF
>
> If it were my meter I would try to repair it. Since it
> responds at all it appears to be a mechanical problem not
> electrical. The coil is not open. I don't know how to get
> these meters open, someone else here may know. If you can
> get it open you may be able to see what has happened. If
> there is anything loose in the gap try blowing it out using
> a hand syrenge rather than canned air, you don't want too
> much pressure. Even just blowing with your mouth may work.
> If that frees it up your home. If the insulation on the
> wire has boiled and expanded it may be more difficult but
> you may be able to free it by using some very fine sandpaper
> in the gap to sand off just enough to get clearance. I
> doubt if its a bearing but it may by that the meter got

> slammed so hard that it knocked a bearing loose. If so you
> will be able to see it and probably be able push the pin
> back where it belongs, I am very doubtful this is the
> problem but should be looked for. Small particles of
> anything but particularly magnetic material can be removed
> from the gap with Scotch tape.
> I have had some success with repairing meters. It takes
> a delicate touch and one must be very careful not to do
> additional damage such as bending pointers. It is certainly
> worth a try.
> Depending on your eyesight a couple of pairs of
> drugstore reading glasses of various strengths may be
> helpful or one of those goose neck illuminated magnifiers.
> It also helpful to have some non-magnetic fine tweezers.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

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http://www.pdswireless.com

[Non-text portions of this message have been removed]

13612. Re: [DrakeRadio] Group E-mail response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:21:39 UTC
From: Richard Knoppow
Topic: 13597 Message: 13612

----- Original Message -----
From: "slowcountry1" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, May 07, 2013 9:34 AM
Subject: [DrakeRadio] Group E-mail response

> All,
>
> I see that it appears that some respond directly to the
> group via e-mail. I tried to respond to a post via my
> e-mail client however; it does not show up on the group.
> Is this as simple as "Reply" in the e-mail client or is
> there some other procedure for doing this?
>
> Thanks,
>
> Doug N9XTF
>
It appears that you are using the Yahoo Groups web
application to read and respond to the list. You can access
it using e-mail but have to enter the necessary information
at Yahoo to have it send that way. Go to:
http://groups.yahoo.com/group/DrakeRadio/join

and change whatever setting you need to have the list sent
to you via e-mail.

I suggest setting up a folder and filter in your e-mail
client to keep all messages from the list together. The
DrakeRadio in brackets in the subject header works well as a
filter criteria.
Different e-mail clients respond differently to the
reply buttons plus different lists may be set up
differently. In this list when I click on reply or reply
all I send only to the list and must cut and paste a second
address. In other lists the "reply" button goes to the
original sender and one must hit reply-all to go to the
list. I think this is bad practice because many valuable
posts never get to the bulk of list members or to the
archive. This is beside the point. Once you have set Yahoo
to send the list via e-mail you can still read it on the web
sit if you choose.

--
Richard Knoppow
Los Angeles

WB6KBL
dickburk@...

13613. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:24:37 UTC
From: Garey Barrell
Topic: 13108 Message: 13613

The TR-4 meter is 200 ohms. Either a 3 or 5 mA full scale.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug wrote:
> Richard,
>
> I opened it up. It's the same as the plate meter I tried to repair. The coil is dark and has a burnt smell to it. It measures like 180 ohm or something. I forget exactly what I measured. I have a feeling the sticky is between the vertical pin and the C cup. I can push the pointer to the right and it ever so slowly returns. I didn't see any obstruction elsewhere. Again, this was a quick inspection.
>
> Without know what the resistance is supposed to be, I'm almost afraid to make it work and then fry the circuit in another rig if and when I need it.
>
> Sent from my iPhone
>
> On May 7, 2013, at 15:03, "Richard Knoppow" <1oldlens1@...> wrote:
>
>> ----- Original Message -----
>> From: "slowcountry1" <dcoffman@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Tuesday, May 07, 2013 9:31 AM
>> Subject: [DrakeRadio] Re: TR-4 Repair
>>
>>> What is the resistance supposed to be as measured across
>>> the movement? If the windings aren't shot, I'd like to
>>> try to make it work; I don't have another spare for future
>>> projects and I'm sure these are unobtanium.
>>>
>>> I still have work to do to the unit, ie T-14 rewire,
>>> troubleshoot hum and cleanup however; I might actually get
>>> some radio time now. Or it would be nice to think so.
>>>
>>> Doug - N9XTF
>> If it were my meter I would try to repair it. Since it
>> responds at all it appears to be a mechanical problem not
>> electrical. The coil is not open. I don't know how to get
>> these meters open, someone else here may know. If you can
>> get it open you may be able to see what has happened. If

>> there is anything loose in the gap try blowing it out using
>> a hand syrenge rather than canned air, you don't want too
>> much pressure. Even just blowing with your mouth may work.
>> If that frees it up your home. If the insulation on the
>> wire has boiled and expanded it may be more difficult but
>> you may be able to free it by using some very fine sandpaper
>> in the gap to sand off just enough to get clearance. I
>> doubt if its a bearing but it may by that the meter got
>> slammed so hard that it knocked a bearing loose. If so you
>> will be able to see it and probably be able push the pin
>> back where it belongs, I am very doubtful this is the
>> problem but should be looked for. Small particles of
>> anything but particularly magnetic material can be removed
>> from the gap with Scotch tape.
>> I have had some success with repairing meters. It takes
>> a delicate touch and one must be very careful not to do
>> additional damage such as bending pointers. It is certainly
>> worth a try.
>> Depending on your eyesight a couple of pairs of
>> drugstore reading glasses of various strengths may be
>> helpful or one of those goose neck illuminated magnifiers.
>> It also helpful to have some non-magnetic fine tweezers.
>>
>> --
>> Richard Knoppow
>> Los Angeles
>> WB6KBL
>> dickburk@...
>>
>>
> ---------------------
> PDSWireless
> Quick and Simple Internet Access
> http://www.pdswireless.com
>
> [Non-text portions of this message have been removed]
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> ------------------------------------
>
> Yahoo! Groups Links
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>

13614. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:31:11 UTC
From: Richard Knoppow
Topic: 13108 Message: 13614

----- Original Message -----
From: "Doug" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Cc: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, May 07, 2013 12:19 PM
Subject: Re: [DrakeRadio] Re: TR-4 Repair

> Richard,
>
> I opened it up. It's the same as the plate meter I tried
> to repair. The coil is dark and has a burnt smell to it.
> It measures like 180 ohm or something. I forget exactly
> what I measured. I have a feeling the sticky is between
> the vertical pin and the C cup. I can push the pointer to
> the right and it ever so slowly returns. I didn't see any
> obstruction elsewhere. Again, this was a quick inspection.
>
> Without know what the resistance is supposed to be, I'm
> almost afraid to make it work and then fry the circuit in
> another rig if and when I need it.
>
Its possible it has a shorted turn but I think more
likely it just overheated. I don't think the meter could be
the cause of the resistor burning out even if it was a dead
short. A shorted turn would make it read wrong and might
damp it slightly but what you have is mechanical I think.
See if alcohol affects the plastic case and if it does not
try spraying some dry alcohol into the bearing to see if it
frees up.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13615. Re: [DrakeRadio] Re: TR-4 Repair

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 19:33:58 UTC
From: Richard Knoppow
Topic: 13108 Message: 13615

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, May 07, 2013 12:24 PM
Subject: Re: [DrakeRadio] Re: TR-4 Repair

> The TR-4 meter is 200 ohms. Either a 3 or 5 mA full
> scale.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Doug wrote:
>> Richard,
>>
>> I opened it up. It's the same as the plate meter I tried
>> to repair. The coil is dark and has a burnt smell to it.
>> It measures like 180 ohm or something. I forget exactly
>> what I measured. I have a feeling the sticky is between
>> the vertical pin and the C cup. I can push the pointer to
>> the right and it ever so slowly returns. I didn't see any
>> obstruction elsewhere. Again, this was a quick
>> inspection.

Sounds like the coil might be OK but a more careful
measurement should be made. If its normally 200 ohms and he
is really getting 180 the coil may have some shorted turns.
Not surprising if the insulation is burned.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13616. Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 21:22:07 UTC
From: Richard Knoppow
Topic: 13616 Message: 13616

In the course of putting together a new fan for my T4XB
I began to wonder about what purpose the fan really serves.
It is the popular wisdom that the fan extends tube life.
From my understanding of how tubes work this is not the
case. Tubes have a hard vacuum inside. A vacuum does not
conduct heat. The proof is the Dewar flask AKA thermos
bottle which works by having a double walled container with
a vacuum inside. The heating of the envelope of the tube is
by radiation from the plate, there is no conduction within
the tube. So, cooling the envelope of an internal anode
tube has little, if any, effect on the plate temperature.
The reason for forced air cooling of larger tubes is to keep
the envelope and seals at the terminals cool. It is
certainly necessary for large tubes where the envelopes can
get hot enough to cause the seals to leak. Large tubes
sometimes develop holes in the envelopes due to hot spots
that soften the glass enough to permit it to be sucked in by
the vacuum but these hot spots are usually caused by
electron bombardment from very high voltages. Such voltages
do not exist for small transmitting tubes of the sort used
in lower powered Drake equipment or most other 100 to 200
watt range ham transmitters.
Plate temperature is extremely important since
excessive heating of some types of plate material can cause
them to outgas or even become distorted. The small tubes of
the sort called "sweep" tubes as widely used in equipment of
the period before solid state amplifier devices are not
designed to run at high plate temperatures as are some of
the larger internal anode tubes. Any color at all indicates
too much heat and may cause damage to the tube's
performance. Since external cooling affects only the
outside parts of the tube the only way to extend tube life
is to avoid excessive heating of the plate. That means
limiting plate dissipation pretty strictly. This is well
known but it should be understood that a fan of whatever
power will not change the dissipation limit of the tube.
Undoubtedly cooling the chassis around the final
amplifier will assist in prolonging other components that
are affected by heat and I don't suggest doing away with the
fans, but it should be understood that they have little if
any effect on tube life other than perhaps protecting the
seals, and certainly do not provide any additional margin
for overload.
Large internal anode tubes like the 4-1000A and others
depend on air cooling for the envelopes and seals, not to

cool the anodes. Some of these tubes, for instance the old 1000T require some air to be blown on the seals but do not rely on forced air for anode cooling.
Another place where cooling may be mis-understood is the use of IERC tube shields on small receiving tubes. These tubes are no different than the transmitting types, that is, keeping the envelopes cool may be good for the envelope but does nothing for the internal structure of the tube. IERC shields evidently _do_ cool the envelope where the common silver colored twist on shields probably increase the heat due to trapped air between the shield and envelope but claims that the tube life is increased IMO need some proving since about the only effect will be to perhaps cool the seals. But on miniature tubes the seals are all at the bottom on the press so head is conducted away by the tube pins and sockets.
Note that the above does not apply to _external_ anode tubes such as the 4CX1000A and even the very old 892 (water cooled) or 892R (air cooled, the R means radiator). The outside of the anode is directly exposed in these tubes and the air flow has a very definite effect on the anode temperature.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13617. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 21:44:17 UTC
From: Garey Barrell
Topic: 13616 Message: 13617

Richard -

Interesting discussion, but empirical results disagree..... One, I HAVE seen 6JB6 tubes with a hole 'sucked' in the side of the bulb. BIAS failure, oversize fuse in the power supply.

ANY heat radiated by the envelope has to reduce the temperature of the glass, which is conducting, however poorly, heat away from the plate. Likewise, any heat blown away from the glass and the immediate area has also got to reduce the heat of the entire system. Glass is NOT a perfect insulator nor an infinite heat block.

Certainly air moved away from the PA cage will extend the life of associated components.

Bottom line is that without a small fan, the top of the T-4X(any) transmitters quickly become too hot to hold your hand on. A small, silent fan will bring it to room temperature. Almost all that heat comes from the PA tubes, whether from conduction, radiation or ...

Maybe we have someone here who recalls more of thermodynamics classes than I do. (Wouldn't take much!)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Richard Knoppow wrote:
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> I began to wonder about what purpose the fan really serves.
> It is the popular wisdom that the fan extends tube life.
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> case. Tubes have a hard vacuum inside. A vacuum does not
> conduct heat. The proof is the Dewar flask AKA thermos
> bottle which works by having a double walled container with
> a vacuum inside. The heating of the envelope of the tube is
> by radiation from the plate, there is no conduction within
> the tube. So, cooling the envelope of an internal anode
> tube has little, if any, effect on the plate temperature.
> The reason for forced air cooling of larger tubes is to keep
> the envelope and seals at the terminals cool. It is
> certainly necessary for large tubes where the envelopes can
> get hot enough to cause the seals to leak. Large tubes
> sometimes develop holes in the envelopes due to hot spots

> that soften the glass enough to permit it to be sucked in by
> the vacuum but these hot spots are usually caused by
> electron bombardment from very high voltages. Such voltages
> do not exist for small transmitting tubes of the sort used
> in lower powered Drake equipment or most other 100 to 200
> watt range ham transmitters.
> Plate temperature is extremely important since
> excessive heating of some types of plate material can cause
> them to outgas or even become distorted. The small tubes of
> the sort called "sweep" tubes as widely used in equipment of
> the period before solid state amplifier devices are not
> designed to run at high plate temperatures as are some of
> the larger internal anode tubes. Any color at all indicates
> too much heat and may cause damage to the tube's
> performance. Since external cooling affects only the
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> is to avoid excessive heating of the plate. That means
> limiting plate dissipation pretty strictly. This is well
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> power will not change the dissipation limit of the tube.
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> amplifier will assist in prolonging other components that
> are affected by heat and I don't suggest doing away with the
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>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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13618. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 21:57:37 UTC
From: vacuuminded2@...
Topic: 13616 Message: 13618

If the glass envelope got hot enough to be sucked in on a sweep tube, the plate was glowing red hot and has already been weakened. Or destroyed. Think CB sweep tube amp.

I agree air cooling will not lower the anode temp of this type of tube in any major way, if at all. The cooler the better for pretty much everything else in there though. My fans are stayin' put.

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On May 7, 2013, at 4:44 PM, Garey Barrell <k4oah@...> wrote:

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> perfect insulator nor an infinite heat block.
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> Certainly air moved away from the PA cage will extend the life of
> associated components.
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> > Richard Knoppow
> > Los Angeles
> > WB6KBL
> > dickburk@...
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13619. Re: Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 22:45:14 UTC
From: slowcountry1
Topic: 13616 Message: 13619

Granted its a much larger tube, but the 3-400 and 3-500 tubes are forced cooled in the L4 and the L4B cooling the seals and anode. Other manufacturers use direct cooling with a single fan. Are they more concerned about anode temperature here?

--- In DrakeRadio@yahoogroups.com, vacuuminded2@... wrote:
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> On May 7, 2013, at 4:44 PM, Garey Barrell <k4oah@...> wrote:
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> > Richard -
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> > > Richard Knoppow
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13620. Re: [DrakeRadio] Re: Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 23:09:59 UTC
From: William Houghton
Topic: 13616 Message: 13620

Hi Garey,

Having done well in my "Heat Transfer in Electrical Engineering" class as part of my BSEE course work, I can refresh your memory. The three methods of heat transfer are conduction, convection, and radiation.

Conduction occurs when two objects of differing temperatures are in physcial contact. Heat transfer occurs by electrons gaining energy.

Convection occurs when a fluid passes over the surface of an object at a different temperature. Air is considered a fluid. Heat transfer occurs by electrons gaining energy. A fan is a form of convection cooling.

Radiation heat transfer is by electromagnetic waves, mainly IR for most objects we would be concerned with.

Richard is correct in that the primary method of heat transfer from an internal anode is by radiation. There is of course some heat transfer from the anode to the glass by means of connecting wires and tube pins, etc.

The glass is not thermally transparent to the IR and will absorb some of the radiated heat from the anode, perhaps a significant amount. The glass in turn will also radiate heat in all directions, radiating some of the energy back towards the plate. I suspect that convection cooling of the glass by a fan will reduce the amount of heat radiated back towards the anode by reducing the temperature of the glass. That may result in the anode temperature being less than it otherwise might be.

73,

Bill

From: slowcountry1 <dcoffman@...>
To: DrakeRadio@yahoogroups.com
Sent: Tue, May 7, 2013 3:45:21 PM
Subject: [DrakeRadio] Re: Tube cooling, what does a fan really do?

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13621. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-07 23:46:40 UTC
From: David Winfree
Topic: 13616 Message: 13621

The heating of the envelope of the tube is
by radiation from the plate, there is no conduction within
the tube. *Agreed. * So, cooling the envelope of an internal anode
tube has little, if any, effect on the plate temperature. *HMMM, requires
more thought here. *

The fact that the glass does, if fact, heat up proves that it acts as an
insulator, however poor. Now that we have established the fact that at
least SOME insulation is occurring, proves that the glass does impede heat
transfer. That further suggests that cooling the glass envelope by moving
air provides less resistance to heat flow, out of the anode. More to the
point, a cooler glass allows more heat transfer at a given anode temp.
That shows that the anode temperature would in fact drop as the glass temp
drops. Now, is it a one to one effect? I think we can show it won't be
any MORE than a one to one drop, but I'm inclined to think the anode drop
is closer to the glass temp drop.

On Tue, May 7, 2013 at 5:22 PM, Richard Knoppow <1oldlens1@...>wrote:

> **
>
>
> In the course of putting together a new fan for my T4XB
> I began to wonder about what purpose the fan really serves.
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> that soften the glass enough to permit it to be sucked in by
> the vacuum but these hot spots are usually caused by
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> in lower powered Drake equipment or most other 100 to 200
> watt range ham transmitters.
> Plate temperature is extremely important since
> excessive heating of some types of plate material can cause

> them to outgas or even become distorted. The small tubes of
> the sort called "sweep" tubes as widely used in equipment of
> the period before solid state amplifier devices are not
> designed to run at high plate temperatures as are some of
> the larger internal anode tubes. Any color at all indicates
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> performance. Since external cooling affects only the
> outside parts of the tube the only way to extend tube life
> is to avoid excessive heating of the plate. That means
> limiting plate dissipation pretty strictly. This is well
> known but it should be understood that a fan of whatever
> power will not change the dissipation limit of the tube.
> Undoubtedly cooling the chassis around the final
> amplifier will assist in prolonging other components that
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> any effect on tube life other than perhaps protecting the
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> for overload.
> Large internal anode tubes like the 4-1000A and others
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> bottom on the press so head is conducted away by the tube
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> tubes such as the 4CX1000A and even the very old 892 (water
> cooled) or 892R (air cooled, the R means radiator). The
> outside of the anode is directly exposed in these tubes and
> the air flow has a very definite effect on the anode
> temperature.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

>
>

[Non-text portions of this message have been removed]

13622. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 01:44:44 UTC
From: Jim Shorney
Topic: 13616 Message: 13622

On Tue, 07 May 2013 17:44:17 -0400, Garey Barrell wrote:

> I
>HAVE seen 6JB6 tubes with a hole 'sucked' in the side of the bulb.

I saw a sweep tube from a CB linear once, years ago, that had the glass sucked in against the side of the plate structure. IIRC, the vacuum actually held, but the tube wasn't working very well regrdless. It was a Varmint XL-1000, or something like that. The term "linear" as highly optimistic with those things.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13623. Re: [DrakeRadio] Re: Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 01:57:20 UTC
From: Jim Shorney
Topic: 13616 Message: 13623

It seems to be conventional wisdom in some circles that 3-500, etc., require some color in the plate to activate the gettering material coating the plate structure. I've seen pictures of tubes of this sort in broadcast service glowing orange. So I would imagine that envelope and seal cooling are of high importance.

73

-Jim
NU0C

On Tue, 07 May 2013 22:45:14 -0000, slowcountry1 wrote:

>
>Granted its a much larger tube, but the 3-400 and 3-500 tubes are forced cooled in the L4 and the L4B cooling the seals and anode. Other manufacturers use direct cooling with a single fan. Are they more concerned about anode temperature here?

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13624. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 02:04:03 UTC
From: Garey Barrell
Topic: 13616 Message: 13624

Chris -

No doubt the tubes were already destroyed, BUT, they were still
drawing current and probably got close to white hot before the glass
sucked in.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

vacuuminded2@... wrote:
> If the glass envelope got hot enough to be sucked in on a sweep tube, the plate was glowing red hot and has already been weakened. Or destroyed. Think CB sweep tube amp.
>
> I agree air cooling will not lower the anode temp of this type of tube in any major way, if at all. The cooler the better for pretty much everything else in there though. My fans are stayin' put.
>
> Regards,
> Chris
>
> Sent from my outdated iPhone wireless thingy
>
> On May 7, 2013, at 4:44 PM, Garey Barrell <k4oah@...> wrote:
>
>> Richard -
>>
>> Interesting discussion, but empirical results disagree..... One, I
>> HAVE seen 6JB6 tubes with a hole 'sucked' in the side of the bulb.
>> BIAS failure, oversize fuse in the power supply.
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>> ANY heat radiated by the envelope has to reduce the temperature of the
>> glass, which is conducting, however poorly, heat away from the plate.
>> Likewise, any heat blown away from the glass and the immediate area
>> has also got to reduce the heat of the entire system. Glass is NOT a
>> perfect insulator nor an infinite heat block.
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>> Certainly air moved away from the PA cage will extend the life of
>> associated components.
>>
>> Bottom line is that without a small fan, the top of the T-4X(any)
>> transmitters quickly become too hot to hold your hand on. A small,
>> silent fan will bring it to room temperature. Almost all that heat

>> comes from the PA tubes, whether from conduction, radiation or ...
>>
>> Maybe we have someone here who recalls more of thermodynamics classes
>> than I do. (Wouldn't take much!)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>>> case. Tubes have a hard vacuum inside. A vacuum does not
>>> conduct heat. The proof is the Dewar flask AKA thermos
>>> bottle which works by having a double walled container with
>>> a vacuum inside. The heating of the envelope of the tube is
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>>> Plate temperature is extremely important since
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>>>
>>>
>>> --
>>> Richard Knoppow
>>> Los Angeles
>>> WB6KBL
>>> dickburk@...
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13625. Re: [DrakeRadio] Re: Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 02:06:22 UTC
From: Garey Barrell
Topic: 13616 Message: 13625

ON those tubes, the biggest concern is the glass/metal seals where the
pins and cap go through the envelope. The glass is hard, high
temperature glass, but coefficient of expansion is different, andthe
seals will leak if they get too hot.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Granted its a much larger tube, but the 3-400 and 3-500 tubes are forced cooled in the L4 and the L4B cooling the seals and anode. Other manufacturers use direct cooling with a single fan. Are they more concerned about anode temperature here?
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>
> --- In DrakeRadio@yahoogroups.com, vacuuminded2@... wrote:
>> If the glass envelope got hot enough to be sucked in on a sweep tube, the plate was glowing red hot and has already been weakened. Or destroyed. Think CB sweep tube amp.
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>> I agree air cooling will not lower the anode temp of this type of tube in any major way, if at all. The cooler the better for pretty much everything else in there though. My fans are stayin' put.
>>
>> Regards,
>> Chris
>>
>> Sent from my outdated iPhone wireless thingy
>>
>> On May 7, 2013, at 4:44 PM, Garey Barrell <k4oah@...> wrote:
>>
>>> Richard -
>>>
>>> Interesting discussion, but empirical results disagree..... One, I
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>>> BIAS failure, oversize fuse in the power supply.
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>>> has also got to reduce the heat of the entire system. Glass is NOT a
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>>> Certainly air moved away from the PA cage will extend the life of

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>>> Bottom line is that without a small fan, the top of the T-4X(any)
>>> transmitters quickly become too hot to hold your hand on. A small,
>>> silent fan will bring it to room temperature. Almost all that heat
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>>>>
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>>>> Richard Knoppow
>>>> Los Angeles
>>>> WB6KBL
>>>> dickburk@...
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13626. Re: [DrakeRadio] Re: Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 02:14:25 UTC
From: Garey Barrell
Topic: 13616 Message: 13626

Bill -

Thanks, I can accept that, there was a glimmer of recognition or two
in there!! :-)

Just getting the heated air out of the area seems to do the most good.
'Natural' convection is good, but if we can help that fluid along in
it's travels over the glass(and metal) surfaces, it can only help to
reduce the temperature of everything involved. Obviouslyfans blowing
OUT or UP 'help' convection rather than hinder it. The same moving
air also helps cool the black metal surfaces surrounding the tubes,
reducing the amount of heat available to reflect BACK into the tubes.

I think I'll stick with Bill Orr, 'As long as it doesn't blow the
tubes out of their sockets ...'

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Having done well in my "Heat Transfer in Electrical Engineering" class as part
> of my BSEE course work, I can refresh your memory. The three methods of heat
> transfer are conduction, convection, and radiation.
>
> Conduction occurs when two objects of differing temperatures are in physcial
> contact. Heat transfer occurs by electrons gaining energy.
>
>
>
> Convection occurs when a fluid passes over the surface of an object at a
> different temperature. Air is considered a fluid. Heat transfer occurs by
> electrons gaining energy. A fan is a form of convection cooling.
>
> Radiation heat transfer is by electromagnetic waves, mainly IR for most objects
> we would be concerned with.
>
> Richard is correct in that the primary method of heat transfer from an internal
> anode is by radiation. There is of course some heat transfer from the anode to
> the glass by means of connecting wires and tube pins, etc.
>

>
> The glass is not thermally transparent to the IR and will absorb some of the
> radiated heat from the anode, perhaps a significant amount. The glass in turn
> will also radiate heat in all directions, radiating some of the energy back
> towards the plate. I suspect that convection cooling of the glass by a fan will
> reduce the amount of heat radiated back towards the anode by reducing the
> temperature of the glass. That may result in the anode temperature being less
> than it otherwise might be.
>
> 73,
>
> Bill
>
>
> _____
> From: slowcountry1 <dcoffman@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tue, May 7, 2013 3:45:21 PM
> Subject: [DrakeRadio] Re: Tube cooling, what does a fan really do?
>
>
>
> Granted its a much larger tube, but the 3-400 and 3-500 tubes are forced cooled
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>>>> Richard Knoppow
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13627. Drake TR-M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 03:21:13 UTC
From: Byron
Topic: 12772 Message: 13627

Hello-Anyone here ever play around with the Drake TR-M Marine Band unit? I picked up some of them out of an old marine-services facility. I do not intend to use them as-is, I have been studying the manual and am thinking about using the main board, driver board, some of the bandpass filters and the osc's to put together a low power SSB transceiver. Not sure if I would care to keep any of the A3A or A3H circuitry/features. Would need to provide tuned circuits for receiver front end and a pre-mixed VFO. Or, the main board would make a nice receiver with suitable front end tuned circuits and VFO, esp with the AM bandwidth feature of crystal filter and diode detector. Just some thoughts, thanks for your time.
73's, Byron

13628. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 05:41:45 UTC
From: William Houghton
Topic: 13616 Message: 13628

"... a cooler glass allows more heat transfer at a given anode temp. That shows that the anode temperature would in fact drop as the glass temp drops. Now, is it a one to one effect? I think we can show it won't be any MORE than a one to one drop, but I'm inclined to think the anode drop is closer to the glass temp drop...."

Radiated heat transfer from a given source does not depend on the temperature of other objects. However every object that does absorb the radiated heat will itself, re-radiate some of that heat. A cooler glass will result in a lower anode temperature because the GLASS will not re-radiate as much heat back towards the anode. The same should hold for other objects in the rig as well.

Its very unlikely that a change in temperature of the glass will result in the same change in temperature of the anode. The change in temperature due to an increase or decrease in heat depends on the amount of heat transfered, the mass of the material ,and it specifiy heat capacity (a property of the material itself).

From: David Winfree <dmw11038@gmail.com>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Tue, May 7, 2013 4:47:33 PM
Subject: Re: [DrakeRadio] Tube cooling, what does a fan really do?

The heating of the envelope of the tube is
by radiation from the plate, there is no conduction within
the tube. *Agreed. * So, cooling the envelope of an internal anode
tube has little, if any, effect on the plate temperature. *HMMM, requires
more thought here. *

The fact that the glass does, if fact, heat up proves that it acts as an insulator, however poor. Now that we have established the fact that at least SOME insulation is occurring, proves that the glass does impede heat transfer. That further suggests that cooling the glass envelope by moving air provides less resistance to heat flow, out of the anode. More to the point, a cooler glass allows more heat transfer at a given anode temp. That shows that the anode temperature would in fact drop as the glass temp drops. Now, is it a one to one effect? I think we can show it won't be any MORE than a one to one drop, but I'm inclined to think the anode drop is closer to the glass temp drop.

On Tue, May 7, 2013 at 5:22 PM, Richard Knoppow <1oldlens1@...>wrote:

> **
>
>
> In the course of putting together a new fan for my T4XB

> I began to wonder about what purpose the fan really serves.
> It is the popular wisdom that the fan extends tube life.
> From my understanding of how tubes work this is not the
> case. Tubes have a hard vacuum inside. A vacuum does not
> conduct heat. The proof is the Dewar flask AKA thermos
> bottle which works by having a double walled container with
> a vacuum inside. The heating of the envelope of the tube is
> by radiation from the plate, there is no conduction within
> the tube. So, cooling the envelope of an internal anode
> tube has little, if any, effect on the plate temperature.
> The reason for forced air cooling of larger tubes is to keep
> the envelope and seals at the terminals cool. It is
> certainly necessary for large tubes where the envelopes can
> get hot enough to cause the seals to leak. Large tubes
> sometimes develop holes in the envelopes due to hot spots
> that soften the glass enough to permit it to be sucked in by
> the vacuum but these hot spots are usually caused by
> electron bombardment from very high voltages. Such voltages
> do not exist for small transmitting tubes of the sort used
> in lower powered Drake equipment or most other 100 to 200
> watt range ham transmitters.
> Plate temperature is extremely important since
> excessive heating of some types of plate material can cause
> them to outgas or even become distorted. The small tubes of
> the sort called "sweep" tubes as widely used in equipment of
> the period before solid state amplifier devices are not
> designed to run at high plate temperatures as are some of
> the larger internal anode tubes. Any color at all indicates
> too much heat and may cause damage to the tube's
> performance. Since external cooling affects only the
> outside parts of the tube the only way to extend tube life
> is to avoid excessive heating of the plate. That means
> limiting plate dissipation pretty strictly. This is well
> known but it should be understood that a fan of whatever
> power will not change the dissipation limit of the tube.
> Undoubtedly cooling the chassis around the final
> amplifier will assist in prolonging other components that
> are affected by heat and I don't suggest doing away with the
> fans, but it should be understood that they have little if
> any effect on tube life other than perhaps protecting the
> seals, and certainly do not provide any additional margin
> for overload.
> Large internal anode tubes like the 4-1000A and others
> depend on air cooling for the envelopes and seals, not to
> cool the anodes. Some of these tubes, for instance the old
> 1000T require some air to be blown on the seals but do not
> rely on forced air for anode cooling.
> Another place where cooling may be mis-understood is the
> use of IERC tube shields on small receiving tubes. These
> tubes are no different than the transmitting types, that is,

> keeping the envelopes cool may be good for the envelope but
> does nothing for the internal structure of the tube. IERC
> shields evidently _do_ cool the envelope where the common
> silver colored twist on shields probably increase the heat
> due to trapped air between the shield and envelope but
> claims that the tube life is increased IMO need some proving
> since about the only effect will be to perhaps cool the
> seals. But on miniature tubes the seals are all at the
> bottom on the press so head is conducted away by the tube
> pins and sockets.
> Note that the above does not apply to _external_ anode
> tubes such as the 4CX1000A and even the very old 892 (water
> cooled) or 892R (air cooled, the R means radiator). The
> outside of the anode is directly exposed in these tubes and
> the air flow has a very definite effect on the anode
> temperature.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@ix.netcom.com
>
>
>

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Yahoo! Groups Links

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13629. Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 14:19:40 UTC
From: John Sehring
Topic: 13616 Message: 13629

When it comes to heat, let's not forget the "Ten Degree C" rule:

For every 10 degrees C increase in operating temperature, every thermally driven chemical process goes twice as fast, i.e. its rate of aging doubles. (The inverse is true for every 10 degree C reduction in temperature.)

It's also known as the "Arrhenius rule". It's a good widely used rule of thumb in many, even critical, industries & environments. For example the U.S. Nuclear Regulatory Commission accepts it as well as the military.

This gives us practical answers for parts made from organic materials, e.g. plastics, rubber, synthetics, and other non-metallics, which age quickly.

None of my boatanchor equipment has a top cover on it. I run my T-4B (no, that's not a mis-type) without the final tube cage: 1) It's then cooler and 2) my 6GJ5's fit (they are taller than 6JB6s). Yes, I must watch the HV present there!

Some gear has a bottom cover on but only if that doesn't create heat concentrations. My R-4B PTO stabilizes faster, too, without a top cover.

Been running exclusively tube-type ham gear here since 1975; no SS stuff on the air from this shack! Includes two Drake Twins, Collins S-Line, Halli SX-101A, Hammarlund HX-50A, all tubes.

I have little doubt that keeping my olde stuff cool has contributed a lot to its longevity.

I don't prefer fans as an awful lot of junque is picked up by them. Look at the interior of the average fan-cooled PC, kerchoo! Grease & dust pushed into the T/R relay? No thanks.

As far as air cooling final (sweep) tubes go, unless the glass envelope melts, I doubt there's much need for it. Running them under *proper* (rated) circuit conditions will never get you to that point.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

13630. Re: [DrakeRadio] Tube cooling, what does a fan really do?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-08 18:55:38 UTC
From: William Houghton
Topic: 13616 Message: 13630

Its interesting that you mention the "Arrhenius rule". I've worked for semiconductor companies for 30+ years. When I statrted in the late 1970's digital chips were typically designed to have a minimum lifetime of 20 years if operated continuously at their max data sheet temperature spec and within all other datasheet limits. The question then becomes how can you say they will last for 20 years without actually operating them for 20 years? Enter the "Arrhenius rule". Using this rule, experts in semiconductor reliabilty were able to come up with standard accelerated life tests. Often these stress tests involve subjecting the parts to temperatures much higher that the max datasheet temperature for hundreds of hours.

Its my understanding that a lot of the semiconductor reliability methods commonly used were originally driven by the military.

From: John Sehring <wb0eq@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Wed, May 8, 2013 7:19:50 AM
Subject: [DrakeRadio] Tube cooling, what does a fan really do?

When it comes to heat, let's not forget the "Ten Degree C" rule:

  For every 10 degrees C increase in operating temperature, every thermally driven chemical process goes twice as fast, i.e. its rate of aging doubles.
 (The inverse is true for every 10 degree C reduction in temperature.)

It's also known as the "Arrhenius rule". It's a good widely used rule of thumb in many, even critical, industries & environments. For example the U.S. Nuclear Regulatory Commission accepts it as well as the military.

This gives us practical answers for parts made from organic materials, e.g. plastics, rubber, synthetics, and other non-metallics, which age quickly.

None of my boatanchor equipment has a top cover on it. I run my T-4B (no, that's not a mis-type) without the final tube cage: 1) It's then cooler and 2) my 6GJ5's fit (they are taller than 6JB6s). Yes, I must watch the HV present there!

Some gear has a bottom cover on but only if that doesn't create heat concentrations. My R-4B PTO stabilizes faster, too, without a top cover.

Been running exclusively tube-type ham gear here since 1975; no SS stuff on the air from this shack! Includes two Drake Twins, Collins S-Line, Halli SX-101A, Hammarlund HX-50A, all tubes.

I have little doubt that keeping my olde stuff cool has contributed a lot to its longevity.

I don't prefer fans as an awful lot of junque is picked up by them. Look at the interior of the average fan-cooled PC, kerchoo! Grease & dust pushed into the T/R relay? No thanks.

As far as air cooling final (sweep) tubes go, unless the glass envelope melts, I doubt there's much need for it. Running them under *proper* (rated) circuit conditions will never get you to that point.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

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13631. 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 01:13:19 UTC
From: Steve Wedge
Topic: 13631 Message: 13631

It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone on this list having some for sale.

Anyone have a couple I can buy?

Cheers -

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

13632. Re: 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 01:45:15 UTC
From: Fred or Ski
Topic: 13631 Message: 13632

Yes Steve, I had asked the group and also researched the RTL IC and found that it is the same as an NTE 9923. If you can find a place that has the NTE replacement line, they should have one. I have a local shop here in Kalamazoo, MI (Ken's 2 way radio [and CB] shop). If you don't find it anywhere, let me know and I can contact Ken and have him send you one.

73,

Ski-WB8YXI

[Non-text portions of this message have been removed]

13633. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 01:56:06 UTC
From: William Houghton
Topic: 13631 Message: 13633

Steve,

It appears to be a UL923 RTL J-K flip flop.

try this:
http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm

The schematics that I can see online are too fuzzy. Is the xtal at 100kHz? If not, what freq is the cal xtal?

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 6:13:23 PM
Subject: [DrakeRadio] 923 IC

It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone on this list having some for sale.

Anyone have a couple I can buy?

Cheers -

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

[Non-text portions of this message have been removed]

13634. Re: [DrakeRadio] Re: 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:08:10 UTC
From: Steve Wedge
Topic: 13631 Message: 13634

Thanks, Ski.

I only had a little time to dig in tonight, but found that I have one rather anemic pulse train coming out of the first one and nothing at all out the second. The jumper is where it should be and the signal level out the buffer should have more than enough amplitude to do the job.

A previous owner had been messing about with the calibrator and he may have fried the IC's. There's a little over 4V at Vcc on the calibrator board.

It has been a wicked long time since I've seen RTL but I'm guessing the supply voltages are similar to TTL.

Output on IC1.5 was about 1V but it was a decent square-wave.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Fred or Ski
Sent: Wednesday, May 08, 2013 9:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: 923 IC

Yes Steve, I had asked the group and also researched the RTL IC and found that it is the same as an NTE 9923. If you can find a place that has the NTE replacement line, they should have one. I have a local shop here in Kalamazoo, MI (Ken's 2 way radio [and CB] shop). If you don't find it anywhere, let me know and I can contact Ken and have him send you one.

73,

Ski-WB8YXI

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13635. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:09:22 UTC
From: Garey Barrell
Topic: 13631 Message: 13635

Steve -

Try

<http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm>

A little pricey, but if you figure in shipping from one of the NTE
distributors..... These are the 'real thing' too.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone
on this list having some for sale.
>
> Anyone have a couple I can buy?
>
> Cheers -
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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> Yahoo! Groups Links
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13636. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:10:05 UTC
From: Don Cunningham
Topic: 13631 Message: 13636

On 5/8/2013 8:13 PM, Steve Wedge wrote:
> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone on this list having some for sale.
>
> Anyone have a couple I can buy?
>
> Cheers -
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)

Steve,

I have a few, and if you get into trouble, I'll share. Last time I offered any, Garey or one of the others gave a link that had them "cheap as dirt", so I withdrew my offer to sell some. I likely have a lifetime supply, with the few I bought years ago, but they were something like $5 or less on the site given. I'm fighting learning Windoze 8 right now on a laptop, so I'm computer disadvantaged right now, HI.

73,
Don, WB5HAK

13637. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:11:54 UTC
From: Don Cunningham
Topic: 13631 Message: 13637

On 5/8/2013 9:10 PM, Don Cunningham wrote:
> On 5/8/2013 8:13 PM, Steve Wedge wrote:
>> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone on this list having some for sale.
>>
>> Anyone have a couple I can buy?
>>
>> Cheers -
>>
>> Steve Wedge, W1ES/4
>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> Steve,
>
> I have a few, and if you get into trouble, I'll share. Last time I
> offered any, Garey or one of the others gave a link that had them "cheap
> as dirt", so I withdrew my offer to sell some. I likely have a lifetime
> supply, with the few I bought years ago, but they were something like $5
> or less on the site given. I'm fighting learning Windoze 8 right now on
> a laptop, so I'm computer disadvantaged right now, HI.
> 73,
> Don, WB5HAK
>
Oops, see I'm a day late and dollar short. "Theeeeeeres Garey!!!" HI
73,
Don, WB5HAK

13638. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:18:27 UTC
From: William Houghton
Topic: 13631 Message: 13638

Garey,

What is the freq of the cal xtal?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 7:09:27 PM
Subject: Re: [DrakeRadio] 923 IC

Steve -

Try

<http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm>

A little pricey, but if you figure in shipping from one of the NTE
distributors..... These are the 'real thing' too.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
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>someone on this list having some for sale.
>
> Anyone have a couple I can buy?
>
> Cheers -
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13639. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:23:27 UTC
From: Steve Wedge
Topic: 13631 Message: 13639

Can't seem to find a straightforward datasheet for this. The Internet used to be useful but now everybody wants to give you a bloody quote before they let you see the Wizard.

Am I correct in assuming Vcc should be around 4 to 5 volts, or is 4V too low? I know with TTL, 4V would be too low.

The previous owner did some messing about with this circuit - probably in an attempt to fix it. It appears that this whole board runs off the filament supply, through a half-wave rectifier and through a 180 ohm resistor. I'm measuring the voltage at Q5 collector at about 4.5V. The buffer has plenty of output, though the waveshape is "soft" and the transistor is definitely saturating.

Output of IC1 is very low, but is there as a square-wave.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: William Houghton
Sent: Wednesday, May 08, 2013 9:56 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

Steve,

It appears to be a UL923 RTL J-K flip flop.

try this:
http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm

The schematics that I can see online are too fuzzy. Is the xtal at 100kHz? If not, what freq is the cal xtal?

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 6:13:23 PM
Subject: [DrakeRadio] 923 IC

It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall someone on this list having some for sale.

Anyone have a couple I can buy?

Cheers -

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

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13640. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:24:46 UTC
From: Steve Wedge
Topic: 13631 Message: 13640

Cheaper than the eBay price.

I just need to know if I've got enough voltage before I replace good parts that are being underfed.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: William Houghton
Sent: Wednesday, May 08, 2013 10:18 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

Garey,

What is the freq of the cal xtal?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 7:09:27 PM
Subject: Re: [DrakeRadio] 923 IC

Steve -

Try

<http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm>

A little pricey, but if you figure in shipping from one of the NTE
distributors..... These are the 'real thing' too.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall
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>
> Anyone have a couple I can buy?
>
> Cheers -

>
> Steve Wedge, W1ES/4
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13641. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 02:45:20 UTC
From: Garey Barrell
Topic: 13631 Message: 13641

Steve -

The 923's are probably good. They typically run on 3-6V, and a logic HIGH is about 3.5V MAX. If you are seeing an output, they're probably alright.

We used those in the Apollo computer in 61 or 62. I built a nice little electronic keyer with some!! :-)

The crystal is 100 kHz, standard HC-13/u. Each F-F divides by two, resultingin 25 kHz output. As I recall, and 1 on aninput is a volt or better. Fairly narrow 'window', which was only one of their many problems!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Steve Wedge wrote:
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> I just need to know if I've got enough voltage before I replace good parts that are being underfed.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: William Houghton
> Sent: Wednesday, May 08, 2013 10:18 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> Garey,
>
> What is the freq of the cal xtal?

>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 8, 2013 7:09:27 PM
> Subject: Re: [DrakeRadio] 923 IC
>
>
> Steve -
>
> Try
>
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>>
>> Steve Wedge, W1ES/4
>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13642. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 03:20:10 UTC
From: William Houghton
Topic: 13631 Message: 13642

Steve,

Per Garey the two 923's form a divide by four circuit. If you can't find a pair of 923's it would be pretty simple to wire in a pair of CMOS D-type f/f to do the same divide by 4 function. The CD4013 is a dual f/f and works with a supply from 3V to 18V. You could put one on a tiny piece of perfboard and use small guage wire to attach it to the 923 connections.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 7:24:41 PM
Subject: Re: [DrakeRadio] 923 IC

Cheaper than the eBay price.

I just need to know if I've got enough voltage before I replace good parts that are being underfed.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: William Houghton
Sent: Wednesday, May 08, 2013 10:18 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

Garey,

What is the freq of the cal xtal?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 8, 2013 7:09:27 PM
Subject: Re: [DrakeRadio] 923 IC

Steve -

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>someone on this list having some for sale.
>
> Anyone have a couple I can buy?
>
> Cheers -
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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> Yahoo! Groups Links
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13643. Drake parts at Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 10:46:17 UTC
From: Michael March
Topic: 13643 Message: 13643

I will have the following available in limited quantities at Dayton
https://sites.google.com/site/marchmagneticpaddles/home/parts

Please stop by space 3421.
Thanks and 73,
Mike K4QU

13644. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 12:06:47 UTC
From: Steve Wedge
Topic: 13631 Message: 13644

Cool. Yeah, that's why I'm trying to find a real datasheet. I know that RTL is different but I never really worked on it.

The second IC now has intermittent output and the levels are from about a normal TTL L of 0.6 to a H around 1.9V. Vcc is a little over 4V.

I can now hear something on the receiver when the calibrator is turned on. It takes 5 -10 seconds for the output to come up from IC2 but the oscillator starts immediately.

I may have to remove this board and get it on the bench.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 08, 2013 10:45 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

Steve -

The 923's are probably good. They typically run on 3-6V, and a logic HIGH is about 3.5V MAX. If you are seeing an output, they're probably alright.

We used those in the Apollo computer in 61 or 62. I built a nice little electronic keyer with some!! :-)

The crystal is 100 kHz, standard HC-13/u. Each F-F divides by two, resultingin 25 kHz output. As I recall, and 1 on aninput is a volt or better. Fairly narrow 'window', which was only one of their many problems!!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Cheaper than the eBay price.
>
> I just need to know if I've got enough voltage before I replace good parts that are being underfed.

>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: William Houghton
> Sent: Wednesday, May 08, 2013 10:18 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> Garey,
>
> What is the freq of the cal xtal?
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 8, 2013 7:09:27 PM
> Subject: Re: [DrakeRadio] 923 IC
>
>
> Steve -
>
> Try
>
> <http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm>
>
> A little pricey, but if you figure in shipping from one of the NTE
> distributors..... These are the 'real thing' too.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall
>> someone on this list having some for sale.
>>
>> Anyone have a couple I can buy?
>>

>> Cheers -
>>
>> Steve Wedge, W1ES/4
>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13645. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 13:50:36 UTC
From: Mark Pilant
Topic: 13631 Message: 13645

Hi Steve.

Check out:
http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_FactSheet.pdf

73

- Mark N1VQW

13646. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 13:59:47 UTC
From: Mike
Topic: 13631 Message: 13646

Steve.

I you can't get it ti work or if anyone else in the list has a dead one I'd like to borrow it.

Like to get the dimensions of the board and mounting holes as I have been thinking of making a pcb that contains the calibrator I designed for qst a while back.

100/25 kHz with pulsed output (can be turned off)

Surface mount parts will be used.

Mike wb8vge

Sent from my iPhone

On May 8, 2013, at 10:23 PM, "Steve Wedge" <w1es1982@triad.rr.com> wrote:

> Can't seem to find a straightforward datasheet for this. The Internet used to be useful but now everybody wants to give you a bloody quote before they let you see the Wizard.
>
> Am I correct in assuming Vcc should be around 4 to 5 volts, or is 4V too low? I know with TTL, 4V would be too low.
>
> The previous owner did some messing about with this circuit - probably in an attempt to fix it. It appears that this whole board runs off the filament supply, through a half-wave rectifier and through a 180 ohm resistor. I'm measuring the voltage at Q5 collector at about 4.5V. The buffer has plenty of output, though the waveshape is "soft" and the transistor is definitely saturating.
>
> Output of IC1 is very low, but is there as a square-wave.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: William Houghton
> Sent: Wednesday, May 08, 2013 9:56 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
> Steve,
>
> It appears to be a UL923 RTL J-K flip flop.
>

> try this:
> http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm
>
> The schematics that I can see online are too fuzzy. Is the xtal at 100kHz? If
> not, what freq is the cal xtal?
>
> Bill
>
> _____
> From: Steve Wedge <w1es1982@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 8, 2013 6:13:23 PM
> Subject: [DrakeRadio] 923 IC
>
> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall
> someone on this list having some for sale.
>
> Anyone have a couple I can buy?
>
> Cheers -
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13647. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 14:03:20 UTC
From: Ian Wilson
Topic: 13631 Message: 13647

There is also the CD4027 dual JK flipflop.

73, ian K3IMW

On Wed, May 8, 2013 at 8:20 PM, William Houghton <rdrbill@...>wrote:

> **
>
>
> Steve,
>
> Per Garey the two 923's form a divide by four circuit. If you can't find a
> pair
> of 923's it would be pretty simple to wire in a pair of CMOS D-type f/f to
> do
> the same divide by 4 function. The CD4013 is a dual f/f and works with a
> supply
> from 3V to 18V. You could put one on a tiny piece of perfboard and use
> small
> guage wire to attach it to the 923 connections.
>
> 73,
>
>
> Bill
>
> _____
> From: Steve Wedge <w1es1982@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 8, 2013 7:24:41 PM
>
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> Cheaper than the eBay price.
>
> I just need to know if I've got enough voltage before I replace good parts
> that
> are being underfed.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended
> thereto.

>
> From: William Houghton
> Sent: Wednesday, May 08, 2013 10:18 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
> Garey,
>
> What is the freq of the cal xtal?
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 8, 2013 7:09:27 PM
> Subject: Re: [DrakeRadio] 923 IC
>
> Steve -
>
> Try
>
> <
> http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm
> >
>
> A little pricey, but if you figure in shipping from one of the NTE
> distributors..... These are the 'real thing' too.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> <www.k4oah.com>
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> Steve Wedge wrote:
> > It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to
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> >
> > Anyone have a couple I can buy?
> >
> > Cheers -
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13648. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 14:05:38 UTC
From: Garey Barrell
Topic: 13631 Message: 13648

Steve -

Yes, there is a data sheet of sorts on the site given earlier. I believe the'design' voltage is 3.6V, but it much more 'flexible' than TTL. The power dissipated, which is high, is directly related to Vcc. I don't remember any capacitors being involved, just Resistor-Transistor Logic. 1961 is just about right, that's when I started with NASA. :-)

Most likely a bad C190. If you checked the 'R-4B Semiconductor Voltages' chart on the CD, you'd see you should have about 3.9 VDC on the 923's.!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Cool. Yeah, that's why I'm trying to find a real datasheet. I know that RTL is different but I never really worked on it.
>
> The second IC now has intermittent output and the levels are from about a normal TTL L of 0.6 to a H around 1.9V. Vcc is a little over 4V.
>
> I can now hear something on the receiver when the calibrator is turned on. It takes 5 -10 seconds for the output to come up from IC2 but the oscillator starts immediately.
>
> I may have to remove this board and get it on the bench.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Wednesday, May 08, 2013 10:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>

>
>
> Steve -
>
> The 923's are probably good. They typically run on 3-6V, and a logic
> HIGH is about 3.5V MAX. If you are seeing an output, they're probably
> alright.
>
> We used those in the Apollo computer in 61 or 62. I built a nice
> little electronic keyer with some!! :-)
>
> The crystal is 100 kHz, standard HC-13/u. Each F-F divides by two,
> resultingin 25 kHz output. As I recall, and 1 on aninput is a volt or
> better. Fairly narrow 'window', which was only one of their many
> problems!!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> Cheaper than the eBay price.
>>
>> I just need to know if I've got enough voltage before I replace good parts that are
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>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
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>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
>>
>>
>> From: William Houghton
>> Sent: Wednesday, May 08, 2013 10:18 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] 923 IC
>>
>>
>>
>> Garey,
>>
>> What is the freq of the cal xtal?
>>
>> _____

>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Wed, May 8, 2013 7:09:27 PM
>> Subject: Re: [DrakeRadio] 923 IC
>>
>>
>> Steve -
>>
>> Try
>>
>> <http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm>
>>
>> A little pricey, but if you figure in shipping from one of the NTE
>> distributors..... These are the 'real thing' too.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
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>>> Anyone have a couple I can buy?
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>>> Cheers -
>>>
>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13649. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 14:13:53 UTC
From: Garey Barrell
Topic: 13631 Message: 13649

Yes, these are both viable substitutions. I don't know just how many
923's this guy has, but he has been selling them for YEARS from that
website!! :-)

I guess I'm just too much a purist, but as long as the original parts
are available, within reason, I'd rather keep these radios original.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ian Wilson wrote:
> There is also the CD4027 dual JK flipflop.
>
> 73, ian K3IMW
>
>
>
> On Wed, May 8, 2013 at 8:20 PM, William Houghton <rdrbill@...>wrote:
>
>> **
>>
>>
>> Steve,
>>
>> Per Garey the two 923's form a divide by four circuit. If you can't find a
>> pair
>> of 923's it would be pretty simple to wire in a pair of CMOS D-type f/f to
>> do
>> the same divide by 4 function. The CD4013 is a dual f/f and works with a
>> supply
>> from 3V to 18V. You could put one on a tiny piece of perfboard and use
>> small
>> guage wire to attach it to the 923 connections.
>>
>> 73,
>>
>>
>> Bill
>>
>> _____
>> From: Steve Wedge <w1es1982@...>
>> To: DrakeRadio@yahoogroups.com

>> Sent: Wed, May 8, 2013 7:24:41 PM
>>
>> Subject: Re: [DrakeRadio] 923 IC
>>
>>
>> Cheaper than the eBay price.
>>
>> I just need to know if I've got enough voltage before I replace good parts
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>> are being underfed.
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
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>>
>> From: William Houghton
>> Sent: Wednesday, May 08, 2013 10:18 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] 923 IC
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>> Garey,
>>
>> What is the freq of the cal xtal?
>>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Wed, May 8, 2013 7:09:27 PM
>> Subject: Re: [DrakeRadio] 923 IC
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>> Steve -
>>
>> Try
>>
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>> http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm
>> A little pricey, but if you figure in shipping from one of the NTE
>> distributors..... These are the 'real thing' too.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:

>>> It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to
>> recall
>>> someone on this list having some for sale.
>>>
>>> Anyone have a couple I can buy?
>>>
>>> Cheers -
>>>
>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13650. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 14:30:58 UTC
From: Steve Wedge
Topic: 13631 Message: 13650

Yup - seen that. Not a data sheet, though.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 9, 2013, at 9:50 AM, Mark Pilant <n1vqw@...> wrote:

> Hi Steve.
>
> Check out:
> http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_FactSheet.pdf
>
> 73
>
> - Mark N1VQW
>

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13651. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 14:32:13 UTC
From: Steve Wedge
Topic: 13631 Message: 13651

Thinking about this, too: more modern calibrator with readily available parts.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 9, 2013, at 9:59 AM, Mike <prosolar@...> wrote:

> Steve.
>
> I you can't get it ti work or if anyone else in the list has a dead one I'd like to borrow it.
>
> Like to get the dimensions of the board and mounting holes as I have been thinking of making a pcb that contains the calibrator I designed for qst a while back.
>
> 100/25 kHz with pulsed output (can be turned off)
>
> Surface mount parts will be used.
>
> Mike wb8vge
>
> Sent from my iPhone
>
> On May 8, 2013, at 10:23 PM, "Steve Wedge" <w1es1982@...> wrote:
>
> > Can't seem to find a straightforward datasheet for this. The Internet used to be useful but now everybody wants to give you a bloody quote before they let you see the Wizard.
> >
> > Am I correct in assuming Vcc should be around 4 to 5 volts, or is 4V too low? I know with TTL, 4V would be too low.
> >
> > The previous owner did some messing about with this circuit - probably in an attempt to fix it. It appears that this whole board runs off the filament supply, through a half-wave rectifier and through a 180 ohm resistor. I'm measuring the voltage at Q5 collector at about 4.5V. The buffer has plenty of output, though the waveshape is "soft" and the transistor is definitely saturating.
> >
> > Output of IC1 is very low, but is there as a square-wave.
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
> >
> > All my computers have my signature with various pearls of wisdom appended thereto.
> >
> > From: William Houghton

> > Sent: Wednesday, May 08, 2013 9:56 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] 923 IC
> >
> > Steve,
> >
> > It appears to be a UL923 RTL J-K flip flop.
> >
> > try this:
> > http://semiconductormuseum.com/MuseumStore/MuseumStore_Fairchild_923_Index.htm
> >
> > The schematics that I can see online are too fuzzy. Is the xtal at 100kHz? If
> > not, what freq is the cal xtal?
> >
> > Bill
> >
> > _____
> > From: Steve Wedge <w1es1982@...>
> > To: DrakeRadio@...m
> > Sent: Wed, May 8, 2013 6:13:23 PM
> > Subject: [DrakeRadio] 923 IC
> >
> > It looks like I've got a bad 923 in the calibrator of an R-4B. I seem to recall
> > someone on this list having some for sale.
> >
> > Anyone have a couple I can buy?
> >
> > Cheers -
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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13652. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 15:41:25 UTC
From: Mark Pilant
Topic: 13631 Message: 13652

Hi Steve.

Another possibility. I do have an old Motorola data book with RTL logic chips listed (not many :-). So far I haven't been able to find a cross reference. If I could get one, I could certainly scan the appropriate pages if there.

BTW, I face data for:
MC913 Type D flip flop
MC702, 802, 902 R-S flip flop
MC723, 816, 916 J-K flip flop
MC774, 874, 974 J-K flip flop
MC790, 791, 890, 891, 990, 991 Dual J-K- flip flop

In general, Vcc is 3.0VDC for MC800F & MC900 series, and 3.6VDC for the MC700 and MC800P series. Max Vcc is 4.0VDC.

Maybe this will help.

73

- Mark N1VQW

13653. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 16:18:43 UTC
From: Steve Wedge
Topic: 13631 Message: 13653

Tnx Mark. Do the sheets mention v(IH), V(IL), V(OH) and V(OL)?

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 9, 2013, at 11:41 AM, Mark Pilant <n1vqw@...> wrote:

> Hi Steve.
>
> Another possibility. I do have an old Motorola data book with RTL logic
> chips listed (not many :-). So far I haven't been able to find a cross
> reference. If I could get one, I could certainly scan the appropriate
> pages if there.
>
> BTW, I face data for:
> MC913 Type D flip flop
> MC702, 802, 902 R-S flip flop
> MC723, 816, 916 J-K flip flop
> MC774, 874, 974 J-K flip flop
> MC790, 791, 890, 891, 990, 991 Dual J-K- flip flop
>
> In general, Vcc is 3.0VDC for MC800F & MC900 series, and 3.6VDC for the
> MC700 and MC800P series. Max Vcc is 4.0VDC.
>
> Maybe this will help.
>
> 73
>
> - Mark N1VQW
>

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13654. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 16:22:19 UTC
From: Garey Barrell
Topic: 13631 Message: 13654

There weren't a whole lot of different chips. There were several types of gates, and as I recall, the NOR function was particularly hard to implement. Biggest problem was heat, not very efficient technology! :-)

Most any single or dual flip-flop will work as a divide-by-four. D, J-K, R-S allrelate to programming different division integers and are immaterial for a fixed, simple divider.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> Hi Steve.
>
> Another possibility. I do have an old Motorola data book with RTL logic
> chips listed (not many :-). So far I haven't been able to find a cross
> reference. If I could get one, I could certainly scan the appropriate
> pages if there.
>
> BTW, I face data for:
> MC913 Type D flip flop
> MC702, 802, 902 R-S flip flop
> MC723, 816, 916 J-K flip flop
> MC774, 874, 974 J-K flip flop
> MC790, 791, 890, 891, 990, 991 Dual J-K- flip flop
>
> In general, Vcc is 3.0VDC for MC800F & MC900 series, and 3.6VDC for the
> MC700 and MC800P series. Max Vcc is 4.0VDC.
>
> Maybe this will help.
>
>

13655. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 16:35:24 UTC
From: Garey Barrell
Topic: 13631 Message: 13655

Steve -

Amazing what's stored in the memory cells when you sweep out the
dust!!! :-)

Input is a B-E junction, 0.5 definitely LOW, 1.0V definitely HIGH

Output is a saturated transistor, 0.2 LOW, 3.0V (Vcc) HIGH

Maximum FANOUT is ~20, but practical design limited it to 5.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Tnx Mark. Do the sheets mention v(IH), V(IL), V(OH) and V(OL)?

Input = 0.5 - .86 = Neutral zone

Input = <0.5 - > 1.0V

Output = 0.2 - 3.0V

>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On May 9, 2013, at 11:41 AM, Mark Pilant <n1vqw@...> wrote:
>
>> Hi Steve.
>>
>> Another possibility. I do have an old Motorola data book with RTL logic
>> chips listed (not many :-). So far I haven't been able to find a cross
>> reference. If I could get one, I could certainly scan the appropriate
>> pages if there.
>>
>> BTW, I face data for:
>> MC913 Type D flip flop
>> MC702, 802, 902 R-S flip flop
>> MC723, 816, 916 J-K flip flop
>> MC774, 874, 974 J-K flip flop
>> MC790, 791, 890, 891, 990, 991 Dual J-K- flip flop
>>
>> In general, Vcc is 3.0VDC for MC800F & MC900 series, and 3.6VDC for the

>> MC700 and MC800P series. Max Vcc is 4.0VDC.
>>
>> Maybe this will help.
>>
>> 73
>>
>> - Mark N1VQW
>>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13656. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 18:52:43 UTC
From: Mark Pilant
Topic: 13631 Message: 13656

> Do the sheets mention v(IH), V(IL), V(OH) and V(OL)?

The 1969 Motorola Semiconductor Data Book only mentions fan out and dissipation. The 1965 Motorola Semiconductor Data Manual is much more limited in the devices listed, but does have a couple of the voltages listed.

Neither input or output low voltages or output low voltages are listed. Only output high is listed, and is 620mV @ -55C, 300mV @ 25C, and 230mV @ 125C. However, looking at the timing diagrams, which do not reference temperature, the high voltage is in excess of 500mV; so it is probably 620mV. These are references to a "low" which would seem to be 0V.

Caveat here, these voltages are for Motorola's mWRTL series not the normal RTL series. I know I have references in my library, but finding them would probably take quite a while :-(Although a web search might turn up typical H/L voltages for RTL logic. (Or someone else may have some old data books laying around :-)

I hope this helps.

73

- Mark N1VQW

13657. 923 uLogic ds

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 18:56:14 UTC
From: Paul Kraemer
Topic: 13657 Message: 13657

I have the original Fairchild data sheet for the uL 923 from 1965

If someone volunteers to put it up on the web site I will scan and email them a copy
Only two pages. How times have changed!
Paul K0UYA

13658. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 19:06:53 UTC
From: Garey Barrell
Topic: 13631 Message: 13658

Input is a transistor Base, so 0 input is anything below that turn-on,
typically around 0.6V.

Output is Vcc of a cut-off transistor, less resistance to limit
current when output transistor is saturated. Number of Loads equal
how many B-E junctions can be turned on through that resistance.

Keep in mind these were very crude devices compared to later TTL.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
> > Do the sheets mention v(IH), V(IL), V(OH) and V(OL)?
>
> The 1969 Motorola Semiconductor Data Book only mentions fan out and
> dissipation. The 1965 Motorola Semiconductor Data Manual is much
> more limited in the devices listed, but does have a couple of the
> voltages listed.
>
> Neither input or output low voltages or output low voltages are listed.
> Only output high is listed, and is 620mV @ -55C, 300mV @ 25C, and
> 230mV @ 125C. However, looking at the timing diagrams, which do not
> reference temperature, the high voltage is in excess of 500mV; so it
> is probably 620mV. These are references to a "low" which would seem
> to be 0V.
>
> Caveat here, these voltages are for Motorola's mWRTL series not the
> normal RTL series. I know I have references in my library, but
> finding them would probably take quite a while :-(Although a web
> search might turn up typical H/L voltages for RTL logic. (Or someone
> else may have some old data books laying around :-)
>
> I hope this helps.
>
> 73
>
> - Mark N1VQW
>

13659. Re: [DrakeRadio] 923 uLogic ds

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 19:07:48 UTC
From: Garey Barrell
Topic: 13657 Message: 13659

Paul -

I'll put it in the files section of the Group.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
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>
> If someone volunteers to put it up on the web site I will scan and email
> them a copy
> Only two pages. How times have changed!
> Paul K0UYA
>

13660. Re: [DrakeRadio] 923 uLogic ds

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 20:02:18 UTC
From: Paul Kraemer
Topic: 13657 Message: 13660

Thanks Garey
Later tonight
Paul K0UYA
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 09, 2013 2:07 PM
Subject: Re: [DrakeRadio] 923 uLogic ds

> Paul -
>
> I'll put it in the files section of the Group.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Paul Kraemer wrote:
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>>
>> If someone volunteers to put it up on the web site I will scan and email
>> them a copy
>> Only two pages. How times have changed!
>> Paul K0UYA
>>
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> Yahoo! Groups Links
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13661. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-09 23:35:00 UTC
From: Steve Wedge
Topic: 13631 Message: 13661

Cool. It appears I probably have good IC's. I'll have to look at the post-output network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.

The worst-case scenario is I bypass the IC's and use it for 100 kHz.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mark Pilant
Sent: Thursday, May 09, 2013 2:52 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

> Do the sheets mention v(IH), V(IL), V(OH) and V(OL)?

The 1969 Motorola Semiconductor Data Book only mentions fan out and dissipation. The 1965 Motorola Semiconductor Data Manual is much more limited in the devices listed, but does have a couple of the voltages listed.

Neither input or output low voltages or output low voltages are listed. Only output high is listed, and is 620mV @ -55C, 300mV @ 25C, and 230mV @ 125C. However, looking at the timing diagrams, which do not reference temperature, the high voltage is in excess of 500mV; so it is probably 620mV. These are references to a "low" which would seem to be 0V.

Caveat here, these voltages are for Motorola's mWRTL series not the normal RTL series. I know I have references in my library, but finding them would probably take quite a while :-(Although a web search might turn up typical H/L voltages for RTL logic. (Or someone else may have some old data books laying around :-)

I hope this helps.

73

- Mark N1VQW

[Non-text portions of this message have been removed]

13662. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 00:55:55 UTC
From: Garey Barrell
Topic: 13631 Message: 13662

I guess you're not seeing my comments....

Have you changed C190 yet?

The input is a B-E junction, so a '0' input is anything up to a
silicon junction or ~600 mV.

An input '1' is anything above about 0.87 mV which is apparently
enough to turn on most junctions, and 1V is used as a 'guaranteed' '1'.

An output '0' is a C-E junction at saturation, usually 2-300 mV in the
era.

An output '1' is a C-E junction at 'open', typically 3.6V, but
resistor limited by max saturation current, and therefor the fanout is
theoretically however many B-E junctions it can turn on in parallel.
We used five as a guideline, but it could be 'stretched' a bit if
necessary!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Cool. It appears I probably have good IC's. I'll have to look at the post-output network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.
>
> The worst-case scenario is I bypass the IC's and use it for 100 kHz.
>
>

13663. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 01:08:01 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 13663

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /Fairchild uL923.pdf
Uploaded by : k4oah <k4oah@...>
Description : Fairchild uL923 Data sheet

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/Fairchild%20uL923.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

k4oah <k4oah@...>

13664. Drake 2C Rx

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 01:04:47 UTC
From: mikezane59
Topic: 13664 Message: 13664

Lost the rf on my 2c. Manual and parts list the RF Amp tube as a 12BA6, the chassis is stenciled 6BA6 an the tube in the rx is a 6BA6. I'm hesitant to replace the 6BA6 until I know for sure if its the correct tube.Anyone out there have any suggestions? Thanks, Mike

13665. Re: [DrakeRadio] Drake 2C Rx

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 01:19:36 UTC
From: Garey Barrell
Topic: 13664 Message: 13665

Mike -

All Drake documentation that I have shows the RF Amp as a 12BZ6. The 12BA6 is the IF Amp.

Somewhere around s/n 1000, the RF Amp was changed to a 6BZ6.This and several other changes undocumented by Drake are shown in the Revised schematic in my CD for the 2-C/2-NT.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

mikezane59 wrote:
> Lost the rf on my 2c. Manual and parts list the RF Amp tube as a 12BA6, the chassis is stenciled 6BA6 an the tube in the rx is a 6BA6. I'm hesitant to replace the 6BA6 until I know for sure if its the correct tube.Anyone out there have any suggestions? Thanks, Mike
>

13666. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 01:27:12 UTC
From: Steve Wedge
Topic: 13631 Message: 13666

No, I haven't changed C190 yet.

Once upon a time, I had a full selection of analog components at my disposal, which I could change on a heartbeat.

I moved from MA to NC and at that time, I sold off all my parts. Thus, if I have to change out anything, I have to look locally to my buddies first, then to my friend in NH who got most of my goodies, then I go to Mouser.

I am suspecting the components on the output. I know for a fact that the PO pulled the whole board out to try and figure out what was wrong. There are a couple of hacks that will have to be straightened out but they're not at issue right now. They look sloppy but are connected.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, May 09, 2013 8:55 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

I guess you're not seeing my comments....

Have you changed C190 yet?

The input is a B-E junction, so a '0' input is anything up to a
silicon junction or ~600 mV.

An input '1' is anything above about 0.87 mV which is apparently
enough to turn on most junctions, and 1V is used as a 'guaranteed' '1'.

An output '0' is a C-E junction at saturation, usually 2-300 mV in the
era.

An output '1' is a C-E junction at 'open', typically 3.6V, but
resistor limited by max saturation current, and therefor the fanout is
theoretically however many B-E junctions it can turn on in parallel.
We used five as a guideline, but it could be 'stretched' a bit if
necessary!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

<www.k4oah.com>

Steve Wedge wrote:
> Cool. It appears I probably have good IC's. I'll have to look at the post-output network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.
>
> The worst-case scenario is I bypass the IC's and use it for 100 kHz.
>
>

[Non-text portions of this message have been removed]

13667. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 01:36:10 UTC
From: Garey Barrell
Topic: 13631 Message: 13667

A leaky C190 is a common cause of slow Vcc rise, and 'buzzy' cal signal!.

Let us know what you find!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> No, I haven't changed C190 yet.
>
> Once upon a time, I had a full selection of analog components at my disposal, which I could change on a heartbeat.
>
> I moved from MA to NC and at that time, I sold off all my parts. Thus, if I have to change out anything, I have to look locally to my buddies first, then to my friend in NH who got most of my goodies, then I go to Mouser.
>
> I am suspecting the components on the output. I know for a fact that the PO pulled the whole board out to try and figure out what was wrong. There are a couple of hacks that will have to be straightened out but they're not at issue right now. They look sloppy but are connected.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Thursday, May 09, 2013 8:55 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> I guess you're not seeing my comments....
>
> Have you changed C190 yet?
>

> The input is a B-E junction, so a '0' input is anything up to a
> silicon junction or ~600 mV.
>
> An input '1' is anything above about 0.87 mV which is apparently
> enough to turn on most junctions, and 1V is used as a 'guaranteed' '1'.
>
> An output '0' is a C-E junction at saturation, usually 2-300 mV in the
> era.
>
> An output '1' is a C-E junction at 'open', typically 3.6V, but
> resistor limited by max saturation current, and therefor the fanout is
> theoretically however many B-E junctions it can turn on in parallel.
> We used five as a guideline, but it could be 'stretched' a bit if
> necessary!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> Cool. It appears I probably have good IC's. I'll have to look at the post-output network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.
>>
>> The worst-case scenario is I bypass the IC's and use it for 100 kHz.
>>
>>
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>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13668. Re: [DrakeRadio] Drake 2C Rx

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 03:56:55 UTC
From: Bernie
Topic: 13664 Message: 13668

Mike,

Get to the underside of the chassis and measure the voltage at the filament pins. If it's 6 volts, then replace with a 6BA6....if 12 volts, then replace with a 12BA6.
Garey may have a bit of insight on this also as I recall he had some messages a while back on this subject. Got to the Yahoo groups page, find the Drake Radio group, sign in and go to messages...and then search for 12BA6 - 6BA6 and read what comes up.

Have fun, let us know what you find.

Bernie in ND
WD0GMD

----- Original Message -----
From: mikezane59
To: DrakeRadio@yahoogroups.com
Sent: Thursday, May 09, 2013 8:04 PM
Subject: [DrakeRadio] Drake 2C Rx

Lost the rf on my 2c. Manual and parts list the RF Amp tube as a 12BA6, the chassis is stenciled 6BA6 an the tube in the rx is a 6BA6. I'm hesitant to replace the 6BA6 until I know for sure if its the correct tube.Anyone out there have any suggestions? Thanks, Mike

[Non-text portions of this message have been removed]

13669. Drake 2c

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-10 23:40:42 UTC
From: mikezane59
Topic: 13669 Message: 13669

Thanks to Bernie, and Garey for the info. Should have thought of measuring the voltage at the tube filaments-Duh, my 75 yr old mind aint what it used to be. Thanks again ALL,
73.,Mike n6zw

13670. TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 12:32:40 UTC
From: KA5DWI
Topic: 13670 Message: 13670

Hi all,
I need some help. There is something I am missing somewhere, but can't seem to recall how to fix it.

When I hook up a straight key to my TR3, I am setting a carrier out when the key is not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.

The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.

I am not sure if the same problem exists if I hook up my electronic keyer.

Thanks. I appreciate any advice.

73s
Art KA5DWI

13671. Re: [DrakeRadio] TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 14:33:08 UTC
From: Garey Barrell
Topic: 13670 Message: 13671

Art -

More information!!

Does it occur with NO key plugged in?? If ONLY when a key is plugged in, does the key have a capacitor across it's terminals? The keying circuit is high impedance, it doesn't take much leakage to key it.

First, make SURE your BIAS supply in the AC-3 isn't failing.... You should see a stable -60 or so volts on the buss. Complete failure of this supply dueto leaky filter capacitors or bad diodes, can cause catastrophic failure (destruction!) of the TR-3 and AC-3. Do NOT leave the transceiver ON and unattended (even in standby) until that supply is stable.

Could be a gassy V4 or V6.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

KA5DWI wrote:
> Hi all,
> I need some help. There is something I am missing somewhere, but can't seem to recall how to fix it.
>
> When I hook up a straight key to my TR3, I am setting a carrier out when the key is not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
>
> The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.
>
> I am not sure if the same problem exists if I hook up my electronic keyer.
>
> Thanks. I appreciate any advice.
>
> 73s
> Art KA5DWI
>
>
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> Yahoo! Groups Links

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13672. PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 17:11:48 UTC
From: Terrell Hamilton
Topic: 13672 Message: 13672

Hey, Garey -

Did you ever get your PS-7 straightened out?
It was kind of odd seeing you struggle with a problem. Anyway, if not,
Buena Suerte!

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

13673. Re: [DrakeRadio] PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 17:42:16 UTC
From: Garey Barrell
Topic: 13672 Message: 13673

Terry -

Yeah, it's all fixed. Replaced all the Pass transistors (three checked BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it up and only three Pass transistors got warm under full load! Turns out the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen one just go up in value, always either right or open.

OF course, there's no such thing as a 0.18 ohm, 15W resistor any more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at full load, but that offends my inner-engineer. Found some of those on eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36 ohm, 10W NTEs, special ordered from Newark. No extra charges, except for direct drop ship from NTE, about $5. So ordered eight of those ($0.44 each) and had them four days later.

So piggy-backed one on another and managed to get them in there with my Drive-by soldering technique. I brought a tremor home from my last hospital escapade, so soldering is kinda get the iron near the joint, get the solder in the general area, and wait for them to run into each otherand the joint at the same time!! The originals had their leads through the mounting eyelet in the terminal strip, so thank goodness for the Hakko! Couple of blips, and the original fell out.

It's been cooking on the bench with the TR-7 for the last few days. Replaced the 500 Hz filter that's been dead for a while and did an alignment there. Two-tone test looks great, 130W output on all but 10M (110W). I ordered some thick-film resistors at 0.62 ohms to use as degenerative feedback on the PA Driver stage, but I haven't been able to get it to 'run-away' thermally as some have mentioned, its little heat sink isn't very warm, so guess I'll leave that for the next time! I have a spare PA here, and I may stick one onthere and see what happens on the bench.

Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was talking to the other station I did a mad search for a microphone! Finally found one in the storage room, plugged it in and gave him a call when he signed. Came right back! Didn't talk long, he was shutting down, but I bet he had a better antenna than my attic mounted 40' dipole!! :-)

I guess I ought to post to the group, since I'm always harping on others to do so..... thanks for asking!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Hey, Garey -
>
> Did you ever get your PS-7 straightened out?
> It was kind of odd seeing you struggle with a problem. Anyway, if not,
> Buena Suerte!
>
>

13674. TR-4 PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 20:48:24 UTC
From: William Houghton
Topic: 13674 Message: 13674

Hi Garey,

Picked up a TR-4 "parts rig" at an electronics flea market this morning (also got an MS-4 and an AC-3 in the deal). The PTO shaft has a lot of vertical play and some horiz play. Is it hosed or is this play adjustable/ repairable?

73,

Bill

[Non-text portions of this message have been removed]

13675. RE: [DrakeRadio] PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 20:51:18 UTC
From: Terrell Hamilton
Topic: 13672 Message: 13675

FB, Garey! Glad to hear it. I sympathize with you about the tremor. It's VERY difficult for me to get a good solder joint anymore. Either the solder, the iron or the component jiggle too much, and I usually end up with a crystalized joint. I've got a nice R4B that won't work anymore due to that - I may have to send it to the guy in Portland, OR sooner or later.

73,

Terry K7WLD

Wenatchee, WA

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Saturday, May 11, 2013 10:42 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] PS-7

Terry -

Yeah, it's all fixed. Replaced all the Pass transistors (three checked BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it up and only three Pass transistors got warm under full load! Turns out the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen one just go up in value, always either right or open.

OF course, there's no such thing as a 0.18 ohm, 15W resistor any more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at full load, but that offends my inner-engineer. Found some of those on eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36 ohm, 10W NTEs, special ordered from Newark. No extra charges, except for direct drop ship from NTE, about $5. So ordered eight of those ($0.44 each) and had them four days later.

So piggy-backed one on another and managed to get them in there with my Drive-by soldering technique. I brought a tremor home from my last hospital escapade, so soldering is kinda get the iron near the joint, get the solder in the general area, and wait for them to run into each otherand the joint at the same time!! The originals had their leads through the mounting eyelet in the terminal strip, so thank goodness for the Hakko! Couple of blips, and the original fell out.

It's been cooking on the bench with the TR-7 for the last few days. Replaced the 500 Hz filter that's been dead for a while and did an alignment there. Two-tone test looks great, 130W output on all but 10M

(110W). I ordered some thick-film resistors at 0.62 ohms to use as degenerative feedback on the PA Driver stage, but I haven't been able to get it to 'run-away' thermally as some have mentioned, its little heat sink isn't very warm, so guess I'll leave that for the next time! I have a spare PA here, and I may stick one onthere and see what happens on the bench.

Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was talking to the other station I did a mad search for a microphone! Finally found one in the storage room, plugged it in and gave him a call when he signed. Came right back! Didn't talk long, he was shutting down, but I bet he had a better antenna than my attic mounted 40' dipole!! :-)

I guess I ought to post to the group, since I'm always harping on others to do so..... thanks for asking!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Hey, Garey -
>
> Did you ever get your PS-7 straightened out?
> It was kind of odd seeing you struggle with a problem. Anyway, if not,
> Buena Suerte!
>
>

[Non-text portions of this message have been removed]

13676. Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 20:47:01 UTC
From: cavemaaaan
Topic: 13676 Message: 13676

Hey Guys :)

I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.

Before I proceed any further, I'm asking the experts for their experiences with a dead PTO. I can extend the three wires and run it outside of the radio for testing purposes.

Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?

I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....

everything else seems okay so far on this radio so I'm stuck at the dead PTO

If anyone's interested, I have taken some pics of the internals of the PTO.

Thanks guys,
Dan Gibbs
KD8SSS
Swartz Creek, MI

13677. Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 20:56:05 UTC
From: David Winfree
Topic: 13676 Message: 13677

Brass tab from tuning coil to pcb got me one time. Cracked solder joint.
Pretty common I hear.

On Saturday, May 11, 2013, cavemaaaan wrote:

> **
>
>
> Hey Guys :)
>
> I just bought this repair special R-4B last week with a dead PTO/VFO. I
> have the +11vdc going into the PTO but I don't get any signal on my o-scope
> out of it on the white/green wire coming out of it. I removed the PTO from
> the radio and have removed the cover. I don't see any obvious bad solder
> joints or anything else suspect yet.
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> with a dead PTO. I can extend the three wires and run it outside of the
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> transistor?
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> where the white tubular cap went bad....
>
> everything else seems okay so far on this radio so I'm stuck at the dead
> PTO
>
> If anyone's interested, I have taken some pics of the internals of the PTO.
>
> Thanks guys,
> Dan Gibbs
> KD8SSS
> Swartz Creek, MI
>
>
>

[Non-text portions of this message have been removed]

13678. Re: [DrakeRadio] TR-4 PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 20:58:37 UTC
From: Garey Barrell
Topic: 13674 Message: 13678

Bill -

There is a hole in the back wall of the 'gearbox' to access an Allen setscrew. There is a clearance hole in the back end of 'some' covers, but if you've not been inside it's risky to go that way. Best to remove the cover so you can see!

Hopefully some gorilla hasn't broken the coil form loose!!!!

Tighten the setscrew only enough to take out any side to side play in the MAIN TUNING shaft. If the set screw has been loosened TOO much, the single ballbetween the end of the shaft and the screw. The balls in the front can also fall out if too loose.

There should be 10 balls, 1/8" dia steel (ACE or True Value) balls in the front race, and one at the back endof the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Picked up a TR-4 "parts rig" at an electronics flea market this morning (also
> got an MS-4 and an AC-3 in the deal). The PTO shaft has a lot of vertical play
> and some horiz play. Is it hosed or is this play adjustable/ repairable?
>
> 73,
>
> Bill
>

13679. Re: [DrakeRadio] TR-4 PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 21:01:37 UTC
From: William Houghton
Topic: 13674 Message: 13679

Garey,

Sounds like my PTO has no balls!
I'll try that when I get a chance.

thanks,

Bill

PS- I'm sure this is "covered" in your CD's?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 11, 2013 1:58:41 PM
Subject: Re: [DrakeRadio] TR-4 PTO

Bill -

There is a hole in the back wall of the 'gearbox' to access an Allen
setscrew. There is a clearance hole in the back end of 'some' covers,
but if you've not been inside it's risky to go that way. Best to
remove the cover so you can see!

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73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

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>
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> and some horiz play. Is it hosed or is this play adjustable/ repairable?
>

> 73,
>
> Bill
>

[Non-text portions of this message have been removed]

13680. Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 21:10:38 UTC
From: Garey Barrell
Topic: 13676 Message: 13680

Dan -

The simple answer is 'YES'. ALL of those failures have been seen over the years. If you can't hear the PTO on a separate receiver, (assuming you don't have a scope,) [000 on the dial is 5.455 MHz], then most likely the FET. Better replacement for the MPF 102 is a 2N5950. The '102 is a 'floor sweeping' with very wide specifications. The 2N3850 or 2N3563 are ok as buffers, a 2N3904 works well.

If the Zener shorts, you won't have +11V on the power terminal. Same for the bypass electrolytic/tantalum in some versions. Ihave documented at least 17 varieties of the PTO, so don't panic if yours isn't exactly like the schematic!

My experience goes like this.

1. Broken solder jointat coil tap.

2. Shorted Electrolytic/Tantalum if present

3. Shorted Zener

4. Dead FET

5. Dead Bipolar

6. Bad (intermittent/noisy) 3000 pF Dur Mica

7. Bad glass (white) TC cap. Avoid replacing this one as it is selected for TC.

Try to avoid moving 'flying' leads and components found in some PTOs as they 'may' affect linearity.

There is a lot more in the archives of the list, and a nice article on WB4HFN's site.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

cavemaaaan wrote:
> Hey Guys :)
>
> I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green

wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.
>
> Before I proceed any further, I'm asking the experts for their experiences with a dead PTO. I can extend the three wires and run it outside of the radio for testing purposes.
>
> Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?
>
> I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....
>
> everything else seems okay so far on this radio so I'm stuck at the dead PTO
>
> If anyone's interested, I have taken some pics of the internals of the PTO.
>
> Thanks guys,
> Dan Gibbs
> KD8SSS
> Swartz Creek, MI
>
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> Yahoo! Groups Links
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13681. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 21:33:10 UTC
From: Steve Wedge
Topic: 13631 Message: 13681

Well, the 923 seems to be working okay but this calibrator board has a lot of issues.

I changed C190 - no cure. Then it started working intermittently. Touched up some soldering. Found that the jumper was shorted to the crystal body. The oscillator that uses the FET is running about 30V p-p. The variable cap does not change the frequency. The crystal may be not original but looks the same and is marked 100 kc.

The 923 output is about 1V in amplitude.

Now the receiver also is generating a lot of random noise that goes away when I pull V5 and does not go away when I pull any other tubes, so I'll be probing around there.

Hey, it's a project! The receiver actually looks a little nice than the one that's currently my "station" receiver, so it may replace it once I get all the bugs ironed out.

Does anyone have a spare trimmer cap they'd like to sell me?

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, May 09, 2013 9:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

A leaky C190 is a common cause of slow Vcc rise, and 'buzzy' cal signal!.

Let us know what you find!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> No, I haven't changed C190 yet.
>
> Once upon a time, I had a full selection of analog components at my disposal, which I could change on a heartbeat.
>
> I moved from MA to NC and at that time, I sold off all my parts. Thus, if I have to change out anything, I have to look locally to my buddies first, then to my friend in NH

who got most of my goodies, then I go to Mouser.
>
> I am suspecting the components on the output. I know for a fact that the PO pulled the whole board out to try and figure out what was wrong. There are a couple of hacks that will have to be straightened out but they're not at issue right now. They look sloppy but are connected.
>
> Steve Wedge, W1ES/4
>
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>
>
> From: Garey Barrell
> Sent: Thursday, May 09, 2013 8:55 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> I guess you're not seeing my comments....
>
> Have you changed C190 yet?
>
> The input is a B-E junction, so a '0' input is anything up to a
> silicon junction or ~600 mV.
>
> An input '1' is anything above about 0.87 mV which is apparently
> enough to turn on most junctions, and 1V is used as a 'guaranteed' '1'.
>
> An output '0' is a C-E junction at saturation, usually 2-300 mV in the
> era.
>
> An output '1' is a C-E junction at 'open', typically 3.6V, but
> resistor limited by max saturation current, and therefor the fanout is
> theoretically however many B-E junctions it can turn on in parallel.
> We used five as a guideline, but it could be 'stretched' a bit if
> necessary!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
>> Cool. It appears I probably have good IC's. I'll have to look at the post-output

network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.
>>
>> The worst-case scenario is I bypass the IC's and use it for 100 kHz.
>>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13682. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 21:43:43 UTC
From: Garey Barrell
Topic: 13631 Message: 13682

Steve -

Just remember ... 'We do this for fun ...' 'We do this for fun ...'
'We do this for ......'

I don't have a trimmer, but I have had good luck disassembling,
cleaning and reassembling them. There is a thin gasket that sticks.
In some cases, it seems 'stuck' and if you get a bigger hammer it may
break the silvering loose from the schematic. Sometimes just a shot of
DeoxIT will clean them up.

On the V5, check D10for leakage/breakdown.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

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> The 923 output is about 1V in amplitude.
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> Now the receiver also is generating a lot of random noise that goes away when I pull V5 and does not go away when I pull any other tubes, so I'll be probing around there.
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> Hey, it's a project! The receiver actually looks a little nice than the one that's currently my "station" receiver, so it may replace it once I get all the bugs ironed out.
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>
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> Sent: Thursday, May 09, 2013 9:36 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> A leaky C190 is a common cause of slow Vcc rise, and 'buzzy' cal signal!.
>
> Let us know what you find!
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>> To: DrakeRadio@yahoogroups.com
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>> I guess you're not seeing my comments....
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13683. Re: [DrakeRadio] PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 22:27:08 UTC
From: Robert Logan
Topic: 13672 Message: 13683

Garry, I just

Sent from my iPhone

On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@...> wrote:

Terry -

Yeah, it's all fixed. Replaced all the Pass transistors (three checked BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it up and only three Pass transistors got warm under full load! Turns out the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen one just go up in value, always either right or open.

OF course, there's no such thing as a 0.18 ohm, 15W resistor any more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at full load, but that offends my inner-engineer. Found some of those on eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36 ohm, 10W NTEs, special ordered from Newark. No extra charges, except for direct drop ship from NTE, about $5. So ordered eight of those ($0.44 each) and had them four days later.

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40' dipole!! :-)

I guess I ought to post to the group, since I'm always harping on
others to do so..... thanks for asking!!

73, Garey - K4OAH
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Terrell Hamilton wrote:
> Hey, Garey -
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> Did you ever get your PS-7 straightened out?
> It was kind of odd seeing you struggle with a problem. Anyway, if not,
> Buena Suerte!
>
>

[Non-text portions of this message have been removed]

13684. Re: [DrakeRadio] PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 22:31:01 UTC
From: Robert Logan
Topic: 13672 Message: 13684

Garry, excuse the premature send. Fat third finger.

Just wanted to let you know that reading the posts today I realized I really enjoy this list. Always knowledgeable, always fun. Really great list.

Keep it up!

Bob, NZ5A

Sent from my iPhone

On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@...> wrote:

Terry -

Yeah, it's all fixed. Replaced all the Pass transistors (three checked BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it up and only three Pass transistors got warm under full load! Turns out the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen one just go up in value, always either right or open.

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So piggy-backed one on another and managed to get them in there with my Drive-by soldering technique. I brought a tremor home from my last hospital escapade, so soldering is kinda get the iron near the joint, get the solder in the general area, and wait for them to run into each otherand the joint at the same time!! The originals had their leads through the mounting eyelet in the terminal strip, so thank goodness for the Hakko! Couple of blips, and the original fell out.

It's been cooking on the bench with the TR-7 for the last few days. Replaced the 500 Hz filter that's been dead for a while and did an alignment there. Two-tone test looks great, 130W output on all but 10M (110W). I ordered some thick-film resistors at 0.62 ohms to use as degenerative feedback on the PA Driver stage, but I haven't been able to get it to 'run-away' thermally as some have mentioned, its little heat sink isn't very warm, so guess I'll leave that for the next time! I have a spare PA here, and I may stick one onthere and see

what happens on the bench.

Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was talking to the other station I did a mad search for a microphone! Finally found one in the storage room, plugged it in and gave him a call when he signed. Came right back! Didn't talk long, he was shutting down, but I bet he had a better antenna than my attic mounted 40' dipole!! :-)

I guess I ought to post to the group, since I'm always harping on others to do so..... thanks for asking!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Hey, Garey -
>
> Did you ever get your PS-7 straightened out?
> It was kind of odd seeing you struggle with a problem. Anyway, if not,
> Buena Suerte!
>
>

[Non-text portions of this message have been removed]

13685. Re: PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 23:03:09 UTC
From: fred
Topic: 13672 Message: 13685

71-CP0020R1800KB14
.18 ohm 20 watt at mouser . they have 4 in stock . the value in the search box is 180 mOHM (milli ohm)
kd5pnt

--- In DrakeRadio@yahoogroups.com, Robert Logan <bob.logan47@...> wrote:
>
> Garry, I just
>
> Sent from my iPhone
>
> On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@...> wrote:
>
> Terry -
>
> Yeah, it's all fixed. Replaced all the Pass transistors (three checked
> BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it
> up and only three Pass transistors got warm under full load! Turns out
> the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen
> one just go up in value, always either right or open.
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> eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one
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> ohm, 10W NTEs, special ordered from Newark. No extra charges, except
> for direct drop ship from NTE, about $5. So ordered eight of those
> ($0.44 each) and had them four days later.
>
> So piggy-backed one on another and managed to get them in there with
> my Drive-by soldering technique. I brought a tremor home from my last
> hospital escapade, so soldering is kinda get the iron near the joint,
> get the solder in the general area, and wait for them to run into each
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> for the Hakko! Couple of blips, and the original fell out.
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> alignment there. Two-tone test looks great, 130W output on all but 10M
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> to get it to 'run-away' thermally as some have mentioned, its little

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> time! I have a spare PA here, and I may stick one onthere and see
> what happens on the bench.
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> Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was
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> Finally found one in the storage room, plugged it in and gave him a
> call when he signed. Came right back! Didn't talk long, he was
> shutting down, but I bet he had a better antenna than my attic mounted
> 40' dipole!! :-)
>
> I guess I ought to post to the group, since I'm always harping on
> others to do so..... thanks for asking!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
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> > >
> > > Did you ever get your PS-7 straightened out?
> > > It was kind of odd seeing you struggle with a problem. Anyway, if not,
> > > Buena Suerte!
> > >
> > >
>
>
>
> [Non-text portions of this message have been removed]
>

13686. Re: [DrakeRadio] TR-4 PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 23:35:36 UTC
From: William Houghton
Topic: 13674 Message: 13686

Garey,

FYI, this TR-4 is s/n 19586.

From: William Houghton <rdrbill@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 11, 2013 2:01:45 PM
Subject: Re: [DrakeRadio] TR-4 PTO

Garey,

Sounds like my PTO has no balls!
I'll try that when I get a chance.

thanks,

Bill

PS- I'm sure this is "covered" in your CD's?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 11, 2013 1:58:41 PM
Subject: Re: [DrakeRadio] TR-4 PTO

Bill -

There is a hole in the back wall of the 'gearbox' to access an Allen
setscrew. There is a clearance hole in the back end of 'some' covers,
but if you've not been inside it's risky to go that way. Best to
remove the cover so you can see!

Hopefully some gorilla hasn't broken the coil form loose!!!!

Tighten the setscrew only enough to take out any side to side play in
the MAIN TUNING shaft. If the set screw has been loosened TOO much,
the single ballbetween the end of the shaft and the screw. The balls
in the front can also fall out if too loose.

There should be 10 balls, 1/8" dia steel (ACE or True Value) balls in
the front race, and one at the back endof the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs

<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Picked up a TR-4 "parts rig" at an electronics flea market this morning (also
> got an MS-4 and an AC-3 in the deal). The PTO shaft has a lot of vertical play
> and some horiz play. Is it hosed or is this play adjustable/ repairable?
>
> 73,
>
> Bill
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13687. Re: [DrakeRadio] 923 IC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 00:15:19 UTC
From: Steve Wedge
Topic: 13631 Message: 13687

1N483. Hmmm. It appears I could sub a 1N4148 for this. Looks like it's being used as a clamp.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Saturday, May 11, 2013 5:43 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 923 IC

Steve -

Just remember ... 'We do this for fun ...' 'We do this for fun ...'
'We do this for ......'

I don't have a trimmer, but I have had good luck disassembling,
cleaning and reassembling them. There is a thin gasket that sticks.
In some cases, it seems 'stuck' and if you get a bigger hammer it may
break the silvering loose from the schematic. Sometimes just a shot of
DeoxIT will clean them up.

On the V5, check D10for leakage/breakdown.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Well, the 923 seems to be working okay but this calibrator board has a lot of issues.
>
> I changed C190 - no cure. Then it started working intermittently. Touched up some soldering. Found that the jumper was shorted to the crystal body. The oscillator that uses the FET is running about 30V p-p. The variable cap does not change the frequency. The crystal may be not original but looks the same and is marked 100 kc.
>
> The 923 output is about 1V in amplitude.
>
> Now the receiver also is generating a lot of random noise that goes away when I pull V5 and does not go away when I pull any other tubes, so I'll be probing around there.
>
> Hey, it's a project! The receiver actually looks a little nice than the one that's

currently my "station" receiver, so it may replace it once I get all the bugs ironed out.
>
> Does anyone have a spare trimmer cap they'd like to sell me?
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Thursday, May 09, 2013 9:36 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] 923 IC
>
>
>
> A leaky C190 is a common cause of slow Vcc rise, and 'buzzy' cal signal!.
>
> Let us know what you find!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> No, I haven't changed C190 yet.
>>
>> Once upon a time, I had a full selection of analog components at my disposal, which I could change on a heartbeat.
>>
>> I moved from MA to NC and at that time, I sold off all my parts. Thus, if I have to change out anything, I have to look locally to my buddies first, then to my friend in NH who got most of my goodies, then I go to Mouser.
>>
>> I am suspecting the components on the output. I know for a fact that the PO pulled the whole board out to try and figure out what was wrong. There are a couple of hacks that will have to be straightened out but they're not at issue right now. They look sloppy but are connected.
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.

>>
>>
>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
>>
>>
>> From: Garey Barrell
>> Sent: Thursday, May 09, 2013 8:55 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] 923 IC
>>
>>
>>
>> I guess you're not seeing my comments....
>>
>> Have you changed C190 yet?
>>
>> The input is a B-E junction, so a '0' input is anything up to a
>> silicon junction or ~600 mV.
>>
>> An input '1' is anything above about 0.87 mV which is apparently
>> enough to turn on most junctions, and 1V is used as a 'guaranteed' '1'.
>>
>> An output '0' is a C-E junction at saturation, usually 2-300 mV in the
>> era.
>>
>> An output '1' is a C-E junction at 'open', typically 3.6V, but
>> resistor limited by max saturation current, and therefor the fanout is
>> theoretically however many B-E junctions it can turn on in parallel.
>> We used five as a guideline, but it could be 'stretched' a bit if
>> necessary!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> Cool. It appears I probably have good IC's. I'll have to look at the post-output network. The tone in the receiver is raspy and off-frequency and doesn't appear to change when I adjust the trimmer cap.
>>>
>>> The worst-case scenario is I bypass the IC's and use it for 100 kHz.
>>>
>>>
>>
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>>

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>> Yahoo! Groups Links
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13688. Re: Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 23:32:33 UTC
From: Greg
Topic: 13676 Message: 13688

Dan -

Just about any of the components can fail, but the problems can usually be attributed to one of the following 4 components:
* Zener diode 1N714
* Silicon diode 1N4148
* Transistor 2N5950, 2N3563
* Solder point on the PTO coil is broken.

Mark Gilger, WB0IQK has a Drake PTO Repair Refurbish article, with Photos.
Should be straight forward repair on the bench.
DRAKE PTO TROUBLESHOOTING by Mark Gilger, KB0IQK
Drake PTO GROUNDING by Donnie Garrett, WA9TGT
http://www.wb4hfn.com/DRAKE/

w9gb

--- In DrakeRadio@yahoogroups.com, "cavemaaaan" <cavemaaan@...> wrote:
>
> Hey Guys :)
>
> I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.
> Before I proceed any further, I'm asking the experts for their experiences with a dead PTO. I can extend the three wires and run it outside of the radio for testing purposes.
> Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?
> I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....
> everything else seems okay so far on this radio so I'm stuck at the dead PTO
>
> If anyone's interested, I have taken some pics of the internals of the PTO.
>
> Thanks guys,
> Dan Gibbs
> KD8SSS
> Swartz Creek, MI
>

13689. Re: [DrakeRadio] Re: PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 02:06:22 UTC
From: Garey Barrell
Topic: 13672 Message: 13689

I did see that one, but it's too big. As I mentioned, the originals
are mounted between two terminal strip eyelets. The 10W that I have,
and the 15W in the Vishay style are both 1.875". The 20W Vishay is 2.5".

The parallel 0.36 ohm at 10W work fine, as there is room for 'height'
(even if is it 'sideways' height!) :-)

Thanks for looking.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

fred wrote:
> 71-CP0020R1800KB14
> .18 ohm 20 watt at mouser . they have 4 in stock . the value in the search box is 180 mOHM (milli ohm)
> kd5pnt
>
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>> Garry, I just
>>
>> Sent from my iPhone
>>
>> On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@...> wrote:
>>
>> Terry -
>>
>> Yeah, it's all fixed. Replaced all the Pass transistors (three checked
>> BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it
>> up and only three Pass transistors got warm under full load! Turns out
>> the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen
>> one just go up in value, always either right or open.
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>> OF course, there's no such thing as a 0.18 ohm, 15W resistor any
>> more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at
>> Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at
>> full load, but that offends my inner-engineer. Found some of those on
>> eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one
>> made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36
>> ohm, 10W NTEs, special ordered from Newark. No extra charges, except
>> for direct drop ship from NTE, about $5. So ordered eight of those
>> ($0.44 each) and had them four days later.

>>
>> So piggy-backed one on another and managed to get them in there with
>> my Drive-by soldering technique. I brought a tremor home from my last
>> hospital escapade, so soldering is kinda get the iron near the joint,
>> get the solder in the general area, and wait for them to run into each
>> otherand the joint at the same time!! The originals had their leads
>> through the mounting eyelet in the terminal strip, so thank goodness
>> for the Hakko! Couple of blips, and the original fell out.
>>
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>> Replaced the 500 Hz filter that's been dead for a while and did an
>> alignment there. Two-tone test looks great, 130W output on all but 10M
>> (110W). I ordered some thick-film resistors at 0.62 ohms to use as
>> degenerative feedback on the PA Driver stage, but I haven't been able
>> to get it to 'run-away' thermally as some have mentioned, its little
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>> time! I have a spare PA here, and I may stick one onthere and see
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>> talking to the other station I did a mad search for a microphone!
>> Finally found one in the storage room, plugged it in and gave him a
>> call when he signed. Came right back! Didn't talk long, he was
>> shutting down, but I bet he had a better antenna than my attic mounted
>> 40' dipole!! :-)
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>> I guess I ought to post to the group, since I'm always harping on
>> others to do so..... thanks for asking!!
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> Terrell Hamilton wrote:
>>> Hey, Garey -
>>>
>>> Did you ever get your PS-7 straightened out?
>>> It was kind of odd seeing you struggle with a problem. Anyway, if not,
>>> Buena Suerte!
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>>>
>>
>>
>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13690. Re: Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 05:10:18 UTC
From: cavemaaaan
Topic: 13676 Message: 13690

Hey guys :)

Well I dug out my 40yr-old junkyard-find variable Kepco PS and applied +11vdc to the white/red wire, ground to the white/black wire, and hooked my Tektronix 2445 oscilloscope to the white/green wire. Nothin.

But then I carefully rapped on the edge of the PTO/VFO PCB with a screwdriver handle and it started to oscillate and turning the PTO/VFO knob varied the frequency which I read on my o-scope thanks to the built in cursor-driven freq counter.

The UNLOADED sine-wave output signal is running steady at 3.5VACp-p. When installed in the radio I think I read it should read approximately 1.8-2.0Vpp when o-scoped at coil L6 or at two of the contacts on the XTAL/VFO switch on the side of the radio. L6 is on the PCB directly behind the AF-GAIN control underneath the chassis.

At the low-end of the PTO/VFO dial, I have a beautiful-shaped sine wave on the display at 4.90MHz. Adjusting to the high end, I get 5.40Mhz. The high end will only adjust mechanically to 5.4MHz and not get to the 5.5MHz as stated on the PTO shield. The PTO will adjust down to 4.55MHz when I go past the dark-gray grease on the worm drive and that's as far as I'm willing to try to see how low it will go. The stated range on the PTO shield is 4.9MHz to 5.5MHz.

It has been running fine now for over 30 minutes on my bench. I am placing a 75-watt light-bulb in my worklight above it to try and simulate heat from the chassis to see if it konks out. I have the PTO/VFO mounted upside down in my Panavise - the PTO PCB is facing up and the bulb is roughly four inches away from the center of the PCB. It's been running this way for about five minutes or more - I just rapped on the edges of the PCB again and there was a slight flutter in the sinewave amplitude but it came right back to 3.5Vpp and is still steady. I'm gonna run it like this for a while and see what happens.

I may try and refresh the solder-connections on most to all of the traces on the PCB. I still don't know if there is just a bad solder joint that I can't see or if a capacitor or resistor is intermittent or not.

Sorry for the long-winded descriptions here but I hope that this may help the next guy out who's looking for some details in trying to figure his PTO/VFO out. My PTO has the MPF102, the 2N3858, and the 1N714 zener diode. There are no other diodes on my PCB.

Dan Gibbs
KD8SSS
Swartz Creek, MI

13691. Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 12:14:36 UTC
From: Steve Wedge
Topic: 13676 Message: 13691

Don't forget the main sm resonating capacitor - about 90 pf. I know mine was changing value intermittently, but I'm thinking it could fail entirely. Rare, but possible if replacing the fet doesn't fix it.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 11, 2013, at 5:10 PM, Garey Barrell <k4oah@...> wrote:

> Dan -
>
> The simple answer is 'YES'. ALL of those failures have been seen over
> the years. If you can't hear the PTO on a separate receiver,
> (assuming you don't have a scope,) [000 on the dial is 5.455 MHz],
> then most likely the FET. Better replacement for the MPF 102 is a
> 2N5950. The '102 is a 'floor sweeping' with very wide specifications.
> The 2N3850 or 2N3563 are ok as buffers, a 2N3904 works well.
>
> If the Zener shorts, you won't have +11V on the power terminal. Same
> for the bypass electrolytic/tantalum in some versions. Ihave
> documented at least 17 varieties of the PTO, so don't panic if yours
> isn't exactly like the schematic!
>
> My experience goes like this.
>
> 1. Broken solder jointat coil tap.
>
> 2. Shorted Electrolytic/Tantalum if present
>
> 3. Shorted Zener
>
> 4. Dead FET
>
> 5. Dead Bipolar
>
> 6. Bad (intermittent/noisy) 3000 pF Dur Mica
>
> 7. Bad glass (white) TC cap. Avoid replacing this one as it is
> selected for TC.
>
> Try to avoid moving 'flying' leads and components found in some PTOs
> as they 'may' affect linearity.
>
> There is a lot more in the archives of the list, and a nice article on
> WB4HFN's site.
>

> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> cavemaaaan wrote:
> > Hey Guys :)
> >
> > I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.
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> >
> > Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?
> >
> > I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....
> >
> > everything else seems okay so far on this radio so I'm stuck at the dead PTO
> >
> > If anyone's interested, I have taken some pics of the internals of the PTO.
> >
> > Thanks guys,
> > Dan Gibbs
> > KD8SSS
> > Swartz Creek, MI
> >
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[Non-text portions of this message have been removed]

13692. Re: [DrakeRadio] Re: Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 13:55:57 UTC
From: Garey Barrell
Topic: 13676 Message: 13692

Dan -

Sounds good. I'd be willing to bet the solder joint on the coil tap
is cracked, at either end.

Your level sounds good, the frequency range is 4.955 to 5.455 MHz.
You might haveto slip the gears, (push left on the nylon gear shaft on
the left side of the gearbox,) and you can also slip the dial on the
hub for the final mm or two.

The diode didn't show up until the C-Line.

Sounds like you're well on your way.!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

cavemaaaan wrote:
> Hey guys :)
>
> Well I dug out my 40yr-old junkyard-find variable Kepco PS and applied +11vdc to the white/red wire, ground to the white/black wire, and hooked my Tektronix 2445 oscilloscope to the white/green wire. Nothin.
>
> But then I carefully rapped on the edge of the PTO/VFO PCB with a screwdriver handle and it started to oscillate and turning the PTO/VFO knob varied the frequency which I read on my o-scope thanks to the built in cursor-driven freq counter.
>
> The UNLOADED sine-wave output signal is running steady at 3.5VACp-p. When installed in the radio I think I read it should read approximately 1.8-2.0Vpp when o-scoped at coil L6 or at two of the contacts on the XTAL/VFO switch on the side of the radio. L6 is on the PCB directly behind the AF-GAIN control underneath the chassis.
>
> At the low-end of the PTO/VFO dial, I have a beautiful-shaped sine wave on the display at 4.90MHz. Adjusting to the high end, I get 5.40Mhz. The high end will only adjust mechanically to 5.4MHz and not get to the 5.5MHz as stated on the PTO shield. The PTO will adjust down to 4.55MHz when I go past the dark-gray grease on the worm drive and that's as far as I'm willing to try to see how low it will go. The stated range on the PTO shield is 4.9MHz to 5.5MHz.
>
> It has been running fine now for over 30 minutes on my bench. I am placing a 75-watt light-bulb in my worklight above it to try and simulate heat from the chassis to see if it konks out. I have the PTO/VFO mounted upside down in my Panavise - the PTO PCB is facing up

and the bulb is roughly four inches away from the center of the PCB. It's been running this way for about five minutes or more - I just rapped on the edges of the PCB again and there was a slight flutter in the sinewave amplitude but it came right back to 3.5Vpp and is still steady. I'm gonna run it like this for a while and see what happens.
>
> I may try and refresh the solder-connections on most to all of the traces on the PCB. I still don't know if there is just a bad solder joint that I can't see or if a capacitor or resistor is intermittent or not.
>
> Sorry for the long-winded descriptions here but I hope that this may help the next guy out who's looking for some details in trying to figure his PTO/VFO out. My PTO has the MPF102, the 2N3858, and the 1N714 zener diode. There are no other diodes on my PCB.
>
> Dan Gibbs
> KD8SSS
> Swartz Creek, MI
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

13693. Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 14:02:22 UTC
From: Garey Barrell
Topic: 13676 Message: 13693

True.

Remember, it may be two 45 pF caps rather than a single 90 pF.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Don't forget the main sm resonating capacitor - about 90 pf. I know mine was changing value intermittently, but I'm thinking it could fail entirely. Rare, but possible if replacing the fet doesn't fix it.
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On May 11, 2013, at 5:10 PM, Garey Barrell <k4oah@...> wrote:
>
>> Dan -
>>
>> The simple answer is 'YES'. ALL of those failures have been seen over
>> the years. If you can't hear the PTO on a separate receiver,
>> (assuming you don't have a scope,) [000 on the dial is 5.455 MHz],
>> then most likely the FET. Better replacement for the MPF 102 is a
>> 2N5950. The '102 is a 'floor sweeping' with very wide specifications.
>> The 2N3850 or 2N3563 are ok as buffers, a 2N3904 works well.
>>
>> If the Zener shorts, you won't have +11V on the power terminal. Same
>> for the bypass electrolytic/tantalum in some versions. Ihave
>> documented at least 17 varieties of the PTO, so don't panic if yours
>> isn't exactly like the schematic!
>>
>> My experience goes like this.
>>
>> 1. Broken solder jointat coil tap.
>>
>> 2. Shorted Electrolytic/Tantalum if present
>>
>> 3. Shorted Zener
>>
>> 4. Dead FET
>>
>> 5. Dead Bipolar

>>
>> 6. Bad (intermittent/noisy) 3000 pF Dur Mica
>>
>> 7. Bad glass (white) TC cap. Avoid replacing this one as it is
>> selected for TC.
>>
>> Try to avoid moving 'flying' leads and components found in some PTOs
>> as they 'may' affect linearity.
>>
>> There is a lot more in the archives of the list, and a nice article on
>> WB4HFN's site.
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>> 73, Garey - K4OAH
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>> cavemaaaan wrote:
>>> Hey Guys :)
>>>
>>> I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.
>>>
>>> Before I proceed any further, I'm asking the experts for their experiences with a dead PTO. I can extend the three wires and run it outside of the radio for testing purposes.
>>>
>>> Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?
>>>
>>> I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....
>>>
>>> everything else seems okay so far on this radio so I'm stuck at the dead PTO
>>>
>>> If anyone's interested, I have taken some pics of the internals of the PTO.
>>>
>>> Thanks guys,
>>> Dan Gibbs
>>> KD8SSS
>>> Swartz Creek, MI
>>>

13694. Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 14:10:48 UTC
From: Eddy Swynar
Topic: 13676 Message: 13694

Hi Guys,

The stability intermittent issue that I had with my T-4X PTO was ultimately & finally solved (touch wood!) by way of a "shot gun" approach, i.e. I replaced practically ALL of the PTO components---resistors included---save for the two transistors...

I found deteriorated solder joints with the main SM caps, and concluded that there were residual changes occurring in some resistor as the thing heated-up with use. So rather than expending the time that it might take looking carefully at each & every one, I simply replaced them all...

...And I have NEVER looked back!

~73~ de Eddy VE3CUI - VE3XZ

PS: I also found that installing a small cooling fan atop the rig---just above the final PA cage---reduced the overall drift of the rig by some 50%! A very worthwhile "mod", IMHO (my fan here EXTRACTS air OUT of the cage, rather than blowing fresh air INTO it).

On 2013-05-12, at 10:02 AM, Garey Barrell wrote:

> True.
>
> Remember, it may be two 45 pF caps rather than a single 90 pF.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
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> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> >
> > On May 11, 2013, at 5:10 PM, Garey Barrell <k4oah@...> wrote:
> >
> >> Dan -
> >>
> >> The simple answer is 'YES'. ALL of those failures have been seen over
> >> the years. If you can't hear the PTO on a separate receiver,
> >> (assuming you don't have a scope,) [000 on the dial is 5.455 MHz],

> >> then most likely the FET. Better replacement for the MPF 102 is a
> >> 2N5950. The '102 is a 'floor sweeping' with very wide specifications.
> >> The 2N3850 or 2N3563 are ok as buffers, a 2N3904 works well.
> >>
> >> If the Zener shorts, you won't have +11V on the power terminal. Same
> >> for the bypass electrolytic/tantalum in some versions. Ihave
> >> documented at least 17 varieties of the PTO, so don't panic if yours
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> >>
> >> 6. Bad (intermittent/noisy) 3000 pF Dur Mica
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> >> 7. Bad glass (white) TC cap. Avoid replacing this one as it is
> >> selected for TC.
> >>
> >> Try to avoid moving 'flying' leads and components found in some PTOs
> >> as they 'may' affect linearity.
> >>
> >> There is a lot more in the archives of the list, and a nice article on
> >> WB4HFN's site.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
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> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> cavemaaaan wrote:
> >>> Hey Guys :)
> >>>
> >>> I just bought this repair special R-4B last week with a dead PTO/VFO. I have the +11vdc going into the PTO but I don't get any signal on my o-scope out of it on the white/green wire coming out of it. I removed the PTO from the radio and have removed the cover. I don't see any obvious bad solder joints or anything else suspect yet.
> >>>
> >>> Before I proceed any further, I'm asking the experts for their experiences with a dead PTO. I can extend the three wires and run it outside of the radio for testing purposes.

> >>>
> >>> Has anyone had the MPF102 FET go bad? The 1N714 diode? The 2N3858 transistor?
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> >>> I read one old post where a silver mica cap went bad...which one? Another where the white tubular cap went bad....
> >>>
> >>> everything else seems okay so far on this radio so I'm stuck at the dead PTO
> >>>
> >>> If anyone's interested, I have taken some pics of the internals of the PTO.
> >>>
> >>> Thanks guys,
> >>> Dan Gibbs
> >>> KD8SSS
> >>> Swartz Creek, MI
> >>>
>

[Non-text portions of this message have been removed]

13695. Screen choke : TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 15:08:48 UTC
From: GREGORY GENTILE
Topic: 13676 Message: 13695

Hi Garey,
Would you know the value of the screen choke in the grid circuit of the final of the TR-6. It is labeled RFC-12 on the schematic. Also where I might find a replacement?
Thank you,

Gregory Gentile
WB2FXO

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 12, 2013 7:02 AM
Subject: Re: [DrakeRadio] Drake R-4B S#7676B Dead PTO/VFO

True.

Remember, it may be two 45 pF caps rather than a single 90 pF.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<http://www.k4oah.com/>

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>> Dan -
>>
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>> the years. If you can't hear the PTO on a separate receiver,
>> (assuming you don't have a scope,) [000 on the dial is 5.455 MHz],
>> then most likely the FET. Better replacement for the MPF 102 is a
>> 2N5950. The '102 is a 'floor sweeping' with very wide specifications.
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>>>
>>> Thanks guys,
>>> Dan Gibbs
>>> KD8SSS
>>> Swartz Creek, MI
>>>

[Non-text portions of this message have been removed]

13696. Re: [DrakeRadio] Screen choke : TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 16:02:48 UTC
From: Garey Barrell
Topic: 13676 Message: 13696

Gregory -

Sorry, I don't have any information on those chokes. It looks like
the one right next to it is the same, so may be able to measure that one.

It's not real critical, just to prevent RF from the PA section from
getting out on the power supply bus. It appears to be a solenoid
wound, single layer on a phenolic form. I would guess something in
the 4- 6 uHy range would be more than adequate. Something like the
Bourns 46xx type fromMouser (542-4609-RC) should work fine. 4 uHy is
about 1200 ohms at 50 MHz.

Again if you have the capability to measure the one next to it, that
would be best. Also, if you wanted to make accurate measurements
there are calculators on the net to calculate the inductance. The
thing you want to watch for is that the Self Resonant frequency is
well above the operating frequency. As the frequency increases, the
inductive reactance goes up, until self-resonance is reached. Above
that the capacitive reactance goes down as the frequency goes up.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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GREGORY GENTILE wrote:
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> Thank you,
>
> Gregory Gentile
> WB2FXO
>

13697. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 16:24:03 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 13697

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

13698. Re: Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-12 23:19:41 UTC
From: cavemaaaan
Topic: 13676 Message: 13698

Well I went through the PTO soldering all connections EXCEPT for the wire on the side of the tuning coil and the leg of the tubular white TC cap that attaches to a wire that flies to the vertical pcb - they were nice and tight and I saw no need to invite trouble. I found that there was a suspect solder-connection from the wire that goes from the ground trace on the horizontal PCB to the ground terminal on the vertical PCB. I could pry a lil with my ceramic tweaker and get the PTO to stop oscillating.

I also cleaned the mechanical "side" of the PTO and got all of the old dirt grease and oil out. Figured out how to put the gears all back together to get the end-stops working properly and within the 4.9 to 5.5MHz range.

I then put the PTO all back together, including the shield, and tested it BEFORE I put it back into the radio....solid as a rock and a range of 4.9MHz to 5.5MHz stop-to-stop on my o-scope. I put it back in the radio and am listening to it right now on 20m with my old Antron-99 10m antenna. Damn I still hafta get a wire up :)

Now, the next "beast" is to repair/replace the Preselector vernier (my T-4X needs a new one too for the RF Tune). Also, new capacitor kit ordered today from Hayseed Hamfest @ $40 delivered - The original caps are working with no noise, but this radio is only 5 months younger than me so...

Thanks Guys,
Dan Gibbs
KD8SSS
Swartz Creek, MI

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Dan -
>
> Sounds good. I'd be willing to bet the solder joint on the coil tap
> is cracked, at either end.
>
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> You might haveto slip the gears, (push left on the nylon gear shaft on
> the left side of the gearbox,) and you can also slip the dial on the
> hub for the final mm or two.
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> The diode didn't show up until the C-Line.
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>
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13699. Re: [DrakeRadio] Re: Drake R-4B S#7676B Dead PTO/VFO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 02:34:13 UTC
From: Steve Wedge
Topic: 13676 Message: 13699

Dan -

For a rig that you'll keep, the Hayseed re-cap kit is definitely a great investment. My R-4B has been re-capped and I swear by it.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: cavemaaaan
Sent: Sunday, May 12, 2013 7:19 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Drake R-4B S#7676B Dead PTO/VFO

Well I went through the PTO soldering all connections EXCEPT for the wire on the side of the tuning coil and the leg of the tubular white TC cap that attaches to a wire that flies to the vertical pcb - they were nice and tight and I saw no need to invite trouble. I found that there was a suspect solder-connection from the wire that goes from the ground trace on the horizontal PCB to the ground terminal on the vertical PCB. I could pry a lil with my ceramic tweaker and get the PTO to stop oscillating.

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> Dan -
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[Non-text portions of this message have been removed]

13700. Re: PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 13:06:12 UTC
From: fred
Topic: 13672 Message: 13700

Garey
the values are probably not too critical as long as they are the same value . I have seen any value up to .9 ohm . the ones in the astron rm-35m are .05 ohm 5 watt ww.

andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> I did see that one, but it's too big. As I mentioned, the originals
> are mounted between two terminal strip eyelets. The 10W that I have,
> and the 15W in the Vishay style are both 1.875". The 20W Vishay is 2.5".
>
> The parallel 0.36 ohm at 10W work fine, as there is room for 'height'
> (even if is it 'sideways' height!) :-)
>
> Thanks for looking.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> fred wrote:
> > 71-CP0020R1800KB14
> > .18 ohm 20 watt at mouser . they have 4 in stock . the value in the search box is 180 mOHM (milli ohm)
> > kd5pnt
> >
> > --- In DrakeRadio@yahoogroups.com, Robert Logan <bob.logan47@> wrote:
> >> Garry, I just
> >>
> >> Sent from my iPhone
> >>
> >> On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@> wrote:
> >>
> >> Terry -
> >>
> >> Yeah, it's all fixed. Replaced all the Pass transistors (three checked
> >> BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it
> >> up and only three Pass transistors got warm under full load! Turns out
> >> the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen
> >> one just go up in value, always either right or open.

> >>
> >> OF course, there's no such thing as a 0.18 ohm, 15W resistor any
> >> more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at
> >> Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at
> >> full load, but that offends my inner-engineer. Found some of those on
> >> eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one
> >> made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36
> >> ohm, 10W NTEs, special ordered from Newark. No extra charges, except
> >> for direct drop ship from NTE, about $5. So ordered eight of those
> >> ($0.44 each) and had them four days later.
> >>
> >> So piggy-backed one on another and managed to get them in there with
> >> my Drive-by soldering technique. I brought a tremor home from my last
> >> hospital escapade, so soldering is kinda get the iron near the joint,
> >> get the solder in the general area, and wait for them to run into each
> >> otherand the joint at the same time!! The originals had their leads
> >> through the mounting eyelet in the terminal strip, so thank goodness
> >> for the Hakko! Couple of blips, and the original fell out.
> >>
> >> It's been cooking on the bench with the TR-7 for the last few days.
> >> Replaced the 500 Hz filter that's been dead for a while and did an
> >> alignment there. Two-tone test looks great, 130W output on all but 10M
> >> (110W). I ordered some thick-film resistors at 0.62 ohms to use as
> >> degenerative feedback on the PA Driver stage, but I haven't been able
> >> to get it to 'run-away' thermally as some have mentioned, its little
> >> heat sink isn't very warm, so guess I'll leave that for the next
> >> time! I have a spare PA here, and I may stick one onthere and see
> >> what happens on the bench.
> >>
> >> Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was
> >> talking to the other station I did a mad search for a microphone!
> >> Finally found one in the storage room, plugged it in and gave him a
> >> call when he signed. Came right back! Didn't talk long, he was
> >> shutting down, but I bet he had a better antenna than my attic mounted
> >> 40' dipole!! :-)
> >>
> >> I guess I ought to post to the group, since I'm always harping on
> >> others to do so..... thanks for asking!!
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> Terrell Hamilton wrote:
> >>> Hey, Garey -
> >>>
> >>> Did you ever get your PS-7 straightened out?

> >>> It was kind of odd seeing you struggle with a problem. Anyway, if not,
> >>> Buena Suerte!
> >>>
> >>>
> >>
> >>
> >> [Non-text portions of this message have been removed]
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> > ------------------------------------
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> > Yahoo! Groups Links
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13701. Re: [DrakeRadio] Re: PS-7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 13:41:14 UTC
From: Garey Barrell
Topic: 13672 Message: 13701

Andrew -

Yes, the values are not too critical, BUT they must all be the SAME.
Their primary function is to share the current equally among multiple
devices in parallel, inserting a little 'negative feedback' in the
regulation loop. IF one (or more) of a group of parallel transistors
tries to pass more current than the others, this resistance causes the
Emitter voltage to increase, reducing the Base current and thus the
total current through that device. So if you have four transistors,
as in the PS-7, each with a 0.18 ohm resistorin series with the
Emitter leads, the current will be equally divided among the four devices.

Of course any voltage dropped across these resistors is lost as heat,
and contributes to the power supply losses, so you want to keep them
as low as possible while still having enough effect on balance.

So, yes, I could have changed all four resistors to 0.2 ohms, but, the
25W resistors were too long for the mechanical arrangement. Since it
appears that no one is making 0.18 ohm, 15W resistors that are 0.875"
long any more, my parallel of two 0.36, 10W is the best that can be
accomplished! At least that's my story, and I'm sticking toit!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

fred wrote:
> Garey
> the values are probably not too critical as long as they are the same value . I have seen
any value up to .9 ohm . the ones in the astron rm-35m are .05 ohm 5 watt ww.
>
> andrew
> kd5pnt
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> I did see that one, but it's too big. As I mentioned, the originals
>> are mounted between two terminal strip eyelets. The 10W that I have,
>> and the 15W in the Vishay style are both 1.875". The 20W Vishay is 2.5".
>>
>> The parallel 0.36 ohm at 10W work fine, as there is room for 'height'
>> (even if is it 'sideways' height!) :-)
>>
>> Thanks for looking.

>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> fred wrote:
>>> 71-CP0020R1800KB14
>>> .18 ohm 20 watt at mouser . they have 4 in stock . the value in the search box is 180 mOHM (milli ohm)
>>> kd5pnt
>>>
>>> --- In DrakeRadio@yahoogroups.com, Robert Logan <bob.logan47@> wrote:
>>>> Garry, I just
>>>>
>>>> Sent from my iPhone
>>>>
>>>> On May 11, 2013, at 12:42 PM, Garey Barrell <k4oah@> wrote:
>>>>
>>>> Terry -
>>>>
>>>> Yeah, it's all fixed. Replaced all the Pass transistors (three checked
>>>> BAD, one OK) and the Driver transistor(Good, but Low Beta). Fired it
>>>> up and only three Pass transistors got warm under full load! Turns out
>>>> the 0.18 ohm, 15W current sense resistor was about 1.5k!. Never seen
>>>> one just go up in value, always either right or open.
>>>>
>>>> OF course, there's no such thing as a 0.18 ohm, 15W resistor any
>>>> more. Only thing close was 0.18 ohm, 10W from NTE (non-stocked at
>>>> Mouser, Digi-Key, Allied, etc., of course). Dissipates about 8W at
>>>> full load, but that offends my inner-engineer. Found some of those on
>>>> eBay, so bought some.NTE has a line of 25W resistors, BUT lowest one
>>>> made is 'ta-da!' 0.2 ohms. Finally decided to go with a pair of 0.36
>>>> ohm, 10W NTEs, special ordered from Newark. No extra charges, except
>>>> for direct drop ship from NTE, about $5. So ordered eight of those
>>>> ($0.44 each) and had them four days later.
>>>>
>>>> So piggy-backed one on another and managed to get them in there with
>>>> my Drive-by soldering technique. I brought a tremor home from my last
>>>> hospital escapade, so soldering is kinda get the iron near the joint,
>>>> get the solder in the general area, and wait for them to run into each
>>>> otherand the joint at the same time!! The originals had their leads
>>>> through the mounting eyelet in the terminal strip, so thank goodness
>>>> for the Hakko! Couple of blips, and the original fell out.
>>>>
>>>> It's been cooking on the bench with the TR-7 for the last few days.
>>>> Replaced the 500 Hz filter that's been dead for a while and did an
>>>> alignment there. Two-tone test looks great, 130W output on all but 10M

>>>> (110W). I ordered some thick-film resistors at 0.62 ohms to use as
>>>> degenerative feedback on the PA Driver stage, but I haven't been able
>>>> to get it to 'run-away' thermally as some have mentioned, its little
>>>> heat sink isn't very warm, so guess I'll leave that for the next
>>>> time! I have a spare PA here, and I may stick one onthere and see
>>>> what happens on the bench.
>>>>
>>>> Ultimate test, heard a W7 in AZ on 15M SSB in a QSO, and while he was
>>>> talking to the other station I did a mad search for a microphone!
>>>> Finally found one in the storage room, plugged it in and gave him a
>>>> call when he signed. Came right back! Didn't talk long, he was
>>>> shutting down, but I bet he had a better antenna than my attic mounted
>>>> 40' dipole!! :-)
>>>>
>>>> I guess I ought to post to the group, since I'm always harping on
>>>> others to do so..... thanks for asking!!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> Terrell Hamilton wrote:
>>>>> Hey, Garey -
>>>>>
>>>>> Did you ever get your PS-7 straightened out?
>>>>> It was kind of odd seeing you struggle with a problem. Anyway, if not,
>>>>> Buena Suerte!
>>>>>
>>>>>

13702. Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 13:56:35 UTC
From: slowcountry1
Topic: 13702 Message: 13702

All,

I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.

Thanks,

Doug - N9XTF

13703. Re: [DrakeRadio] Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 14:36:55 UTC
From: Garey Barrell
Topic: 13702 Message: 13703

Doug -

I'm not sure I follow what you are looking for.

A 'separate' band monitor is easy, the 'Five Dash, Inc.' Ensemble II SDR receiver ~ $75 kit with case, is a great receiver, 0-30 MHz. It does require a PC though. You can view up to 90 kHz anywhere in the range. All signal processing is done at audio frequencies in the PC, all modes, IF bandwidths, detectors, AVC, audio, etc. If you just want to play, a 'single band' (160-20M) version is ~$20.

Some have taken a single band version tuned to the IF of a conventional radio as a band scope. This has limited value with today's radios, since all have some sort of 'roofing filter' very early in the circuit. For example, the 4 Line receivers have an 8 kHz wide filter right after the second mixer, making that the widest your band scope can cover. If you put it there, then all you are using of the conventional radio is the frequency conversion 'front end' to convert 0-30 MHz down to 5.645 MHz +/- 4 kHz. Not real useful.

???

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> All,
>
> I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
>
> Thanks,
>
> Doug - N9XTF
>
>
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> Yahoo! Groups Links
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13704. Re: [DrakeRadio] Screen choke : TR-6 REPLY

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 15:21:27 UTC
From: GREGORY GENTILE
Topic: 13676 Message: 13704

Hi Garey,
Thank you, that's what I figured! I just wanted to double check.
Thank you!
73's

Gregory Gentile
WB2FXO

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, May 12, 2013 9:02 AM
Subject: Re: [DrakeRadio] Screen choke : TR-6

Gregory -

Sorry, I don't have any information on those chokes. It looks like
the one right next to it is the same, so may be able to measure that one.

It's not real critical, just to prevent RF from the PA section from
getting out on the power supply bus. It appears to be a solenoid
wound, single layer on a phenolic form. I would guess something in
the 4- 6 uHy range would be more than adequate. Something like the
Bourns 46xx type fromMouser (542-4609-RC) should work fine. 4 uHy is
about 1200 ohms at 50 MHz.

Again if you have the capability to measure the one next to it, that
would be best. Also, if you wanted to make accurate measurements
there are calculators on the net to calculate the inductance. The
thing you want to watch for is that the Self Resonant frequency is
well above the operating frequency. As the frequency increases, the
inductive reactance goes up, until self-resonance is reached. Above
that the capacitive reactance goes down as the frequency goes up.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<http://www.k4oah.com/>

GREGORY GENTILE wrote:
> Hi Garey,
> Would you know the value of the screen choke in the grid circuit of the final of the
TR-6. It is labeled RFC-12 on the schematic. Also where I might find a replacement?
> Thank you,
>

> Gregory Gentile
> WB2FXO
>

[Non-text portions of this message have been removed]

13705. Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 15:30:44 UTC
From: cavemaaaan
Topic: 13705 Message: 13705

Hello again all :)

In reading some older posts, I ran across a reply by Garey Barrell where he states:

"I just learned the other day, (after 50 years!,) that there are readings on that voltage chart that ONLY match IF you use a Vacuum Tube Volt Meter (VTVM) to make them. Serious differences, like from e.g., 1.4 VDC to 7.6 VDC."

By the time I got my electronics wings in the early nineties, the DMM or DVM was already king. I worked on some old tube guitar amps year ago whose schematics and service manuals talked of the "mysterious" VTVM but I was always able to repair without the need for one.

So, Garey got my wondering and I'm asking the Drake Sages here for the benefit of all for their thoughts on the differences between a VTVM and a modern quality DMM.

For what it's worth, I've used my Fluke 79 at work and at home for 20 years.

Cheers all,
Dan
KD8SSS

13706. Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 15:51:08 UTC
From: cavemaaaan
Topic: 13702 Message: 13706

Hey Doug :)

I love your question as I'm interested in doing the same thing myself WITH a PC-based SDR. I have a NooElec TV28T RTL2832U-based tuner ($20) fed with a RANVerter 2.2 upconverter ($35) feeding HDSDR freeware software. It's a sweet little receiver.

A newbie question I have is how I can protect the front-end of this receiver from overload during my transmissions as my house is on a small lot so the main vertical RX/TX antenna will be within 50' of the operating position. The SDR will be on a separate wire antenna of some sort. I'm still saving money to buy a good outdoor antenna so I haven't been able to experiment yet.

I've got a feeling I'll need some sort of TX mute line or an attenuator actuated by a TX relay.

Dan
KD8SSS

> I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
>
> Thanks,
> Doug - N9XTF

13707. Re: [DrakeRadio] Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 15:59:03 UTC
From: Steve Wedge
Topic: 13702 Message: 13707

The problem with trying to use a Drake receiver with a band scope is that the circuits from the RF amp forward are rather sharply-tuned with the PRESELECTOR.

You need something broadband if you want an accurate spectrum display.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: slowcountry1
Sent: Monday, May 13, 2013 9:56 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Stand alone spectrum display

All,

I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.

Thanks,

Doug - N9XTF

[Non-text portions of this message have been removed]

13708. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 16:03:03 UTC
From: Garey Barrell
Topic: 13705 Message: 13708

Dan -

The biggest difference is in the test leads!

The DMM has plain ol'wire leads, three feet long or so. When you touch the Red probeto the Grid (Hi-Z!) of an oscillator, the additional capacity to ground is enough to kill the oscillator. Most 'good' DMMs have a 10M or higher input impedance, so no danger of loading most Hi-Z DC circuits.

The VTVM, designed in the era when tubes with their Hi-Z topology were king, has a 10M input impedance for the metertoo!. But... The Positive (Red) test lead is a shielded wire, and there is a 1M resistor right at the tip of the probe, only for DC measurements. The resistor is switched out for AC and Ohmsmeasurements. This results in a 1M isolation right at the probe tip, decoupling all that test lead inductance, capacitance and RF pick up stuff from the test point. The shielded cable even operates as a distributed low pass filter for any RF seen by the probe tip. There have been a few people who 'think' they're smarter than all theVTVM designers and cleverly move that resistor from the tip of the probe to a point inside the meter, placing it so that it is 'automatically' switched in and out for DC or AC readings!! See how much smarter they are?!?!? :-) As with a lotof internet 'wisdom', it ain't.

So you could modify your DMM to accept a shielded 'Red' lead with a 1M resistor at the tip, and compensate for the 10/11 division rate, or pick up a nice Heath or any other VTVM -with probes- to use for RF purposes. Plus, if you haven't already discovered this on your own, there's no way a DMM can competewith a nice, big ANALOG meter when it comes to peaking and dipping things!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

cavemaaaan wrote:
> Hello again all :)
>
> In reading some older posts, I ran across a reply by Garey Barrell where he states:
>
> "I just learned the other day, (after 50 years!,) that there are readings on that voltage

chart that ONLY match IF you use a Vacuum Tube Volt Meter (VTVM) to make them. Serious differences, like from e.g., 1.4 VDC to 7.6 VDC."
>
> By the time I got my electronics wings in the early nineties, the DMM or DVM was already king. I worked on some old tube guitar amps year ago whose schematics and service manuals talked of the "mysterious" VTVM but I was always able to repair without the need for one.
>
> So, Garey got my wondering and I'm asking the Drake Sages here for the benefit of all for their thoughts on the differences between a VTVM and a modern quality DMM.
>
> For what it's worth, I've used my Fluke 79 at work and at home for 20 years.
>
> Cheers all,
> Dan
> KD8SSS
>
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> Yahoo! Groups Links
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13709. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 16:37:57 UTC
From: Dan Galligan
Topic: 13705 Message: 13709

Garey,
It sounds, from what you said, here, that one might be able to make their own test leads.
I have a very nice condition Triplett 650 VTVM, and a Triplett 630 VOM, and a box of leads, that I picked up, for the net sum of, free, ninety free. I actually paid $25 for it all, but sold a second, lesser condition 630, for the initial investment, of $25, so, the rest cost me nothing.
One of the members here, was kind enough, to send me a scan of the Triplett manual.
It appears that there is a 5726 tube, in the HV probe, and I am not certain about the materials to build it.
Any suggestions? Anyone have a probe, they would be willing to part with?

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On May 13, 2013, at 9:03, Garey Barrell <k4oah@...> wrote:

> Dan -
>
> The biggest difference is in the test leads!
>
> The DMM has plain ol'wire leads, three feet long or so. When you
> touch the Red probeto the Grid (Hi-Z!) of an oscillator, the
> additional capacity to ground is enough to kill the oscillator. Most
> 'good' DMMs have a 10M or higher input impedance, so no danger of
> loading most Hi-Z DC circuits.
>
> The VTVM, designed in the era when tubes with their Hi-Z topology were
> king, has a 10M input impedance for the metertoo!. But... The
> Positive (Red) test lead is a shielded wire, and there is a 1M
> resistor right at the tip of the probe, only for DC measurements. The
> resistor is switched out for AC and Ohmsmeasurements. This results in
> a 1M isolation right at the probe tip, decoupling all that test lead
> inductance, capacitance and RF pick up stuff from the test point. The
> shielded cable even operates as a distributed low pass filter for any
> RF seen by the probe tip. There have been a few people who 'think'

> they're smarter than all theVTVM designers and cleverly move that
> resistor from the tip of the probe to a point inside the meter,
> placing it so that it is 'automatically' switched in and out for DC or
> AC readings!! See how much smarter they are?!?!? :-) As with a lotof
> internet 'wisdom', it ain't.
>
> So you could modify your DMM to accept a shielded 'Red' lead with a 1M
> resistor at the tip, and compensate for the 10/11 division rate, or
> pick up a nice Heath or any other VTVM -with probes- to use for RF
> purposes. Plus, if you haven't already discovered this on your own,
> there's no way a DMM can competewith a nice, big ANALOG meter when it
> comes to peaking and dipping things!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> cavemaaaan wrote:
>> Hello again all :)
>>
>> In reading some older posts, I ran across a reply by Garey Barrell where he states:
>>
>> "I just learned the other day, (after 50 years!,) that there are readings on that
voltage chart that ONLY match IF you use a Vacuum Tube Volt Meter (VTVM) to make them.
Serious differences, like from e.g., 1.4 VDC to 7.6 VDC."
>>
>> By the time I got my electronics wings in the early nineties, the DMM or DVM was already
king. I worked on some old tube guitar amps year ago whose schematics and service manuals
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>> So, Garey got my wondering and I'm asking the Drake Sages here for the benefit of all
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>> For what it's worth, I've used my Fluke 79 at work and at home for 20 years.
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>> Cheers all,
>> Dan
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>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13710. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 18:38:29 UTC
From: Ethan Blanton
Topic: 13702 Message: 13710

cavemaaaan spake unto us the following wisdom:
> A newbie question I have is how I can protect the front-end of this
> receiver from overload during my transmissions as my house is on a
> small lot so the main vertical RX/TX antenna will be within 50' of the
> operating position. The SDR will be on a separate wire antenna of some
> sort. I'm still saving money to buy a good outdoor antenna so I
> haven't been able to experiment yet.
>
> I've got a feeling I'll need some sort of TX mute line or an
> attenuator actuated by a TX relay.

You can do that, or you can simply clamp the antenna line voltage with diodes -- your receive will be useless during transmit, but you'll protect the radio. Use two diodes back to back, like this:

```
\|/
| +-|<--GND
| |
+--+----------RCVR
|
+->|--GND
```

This will prevent received signals from swinging more than about 1.4V P-P, which should be plenty of clamping to protect your front end (verify that!) while leaving smaller signals essentially unaffected.

Ethan

13711. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 19:00:45 UTC
From: Geoffrey S. Mendelson
Topic: 13702 Message: 13711

On 05/13/2013 09:38 PM, Ethan Blanton wrote:
> cavemaaaan spake unto us the following wisdom:
> > A newbie question I have is how I can protect the front-end of this
> > receiver from overload during my transmissions as my house is on a
> > small lot so the main vertical RX/TX antenna will be within 50' of the
> > operating position. The SDR will be on a separate wire antenna of some
> > sort. I'm still saving money to buy a good outdoor antenna so I
> > haven't been able to experiment yet.
> >
> > I've got a feeling I'll need some sort of TX mute line or an
> > attenuator actuated by a TX relay.
>
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> diodes -- your receive will be useless during transmit, but you'll
> protect the radio. Use two diodes back to back, like this:
>
> \|/
> | +-|<--GND
> | |
> +--+----------RCVR
> |
> +->|--GND
>
> This will prevent received signals from swinging more than about 1.4V
> P-P, which should be plenty of clamping to protect your front end
> (verify that!) while leaving smaller signals essentially unaffected.

Having posted something similar to that in reference to a Sony ICF-2010, probably 20 years ago, it was pointed out to me that there will be intermod due to mixing in the diodes if strong signals are present that are not enough to cause the diodes to clamp.

Note that the USB DVB-T sticks with E4000 receivers are supposed to have clamping diodes on them. There is at least one eBay vendor that shows you a picture of the board in what he sells so you can see they really have E4000 receivers, and the clamping diode (SMT) is quite visible.

You can get the same sticks (TeraTec) for about half the price, but I have not opened mine to see if the diodes are there or not. The software I use (rtl_fm) verifies they are E4000's.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13712. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 19:19:28 UTC
From: Ethan Blanton
Topic: 13702 Message: 13712

Geoffrey S. Mendelson spake unto us the following wisdom:
> On 05/13/2013 09:38 PM, Ethan Blanton wrote:
> > > You can do that, or you can simply clamp the antenna line voltage with
> > > diodes -- your receive will be useless during transmit, but you'll
> > > protect the radio. Use two diodes back to back, like this:
>
> Having posted something similar to that in reference to a Sony ICF-2010,
> probably 20 years ago, it was pointed out to me that there will be
> intermod due to mixing in the diodes if strong signals are present that
> are not enough to cause the diodes to clamp.

Yes, that is true. There are ways to mitigate that, but they require
more than two components. :-) Anything between your antenna and
first amplifier will also raise the noise floor -- although I think
with those USB dongles, that's probably not an effective concern, and
on HF it's gotta be pretty noisy to matter anyway.

Ethan

13713. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 19:19:59 UTC
From: Richard Knoppow
Topic: 13705 Message: 13713

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 13, 2013 9:37 AM
Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus
Digital Multi Meter DMM

> Garey,
> It sounds, from what you said, here, that one might be
> able to make their own test leads.
> I have a very nice condition Triplett 650 VTVM, and a
> Triplett 630 VOM, and a box of leads, that I picked up,
> for the net sum of, free, ninety free. I actually paid $25
> for it all, but sold a second, lesser condition 630, for
> the initial investment, of $25, so, the rest cost me
> nothing.
> One of the members here, was kind enough, to send me a
> scan of the Triplett manual.
> It appears that there is a 5726 tube, in the HV probe, and
> I am not certain about the materials to build it.
> Any suggestions? Anyone have a probe, they would be
> willing to part with?
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb

This depends on the particular VTVM, many were used
with plain leads especially those without built-in leads.
An example of a lab grade meter is the General Radio
1800A/B.
Most VTVM's had about 10 meg input resistance. Many
DMM's have the same resistance and will read the same as the
VTVM. Some VTVM's have much higher input resistance, for
example the Hewlett-Packard 410B or C or the -hp- 412A.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13714. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 20:02:43 UTC
From: Paul Christensen
Topic: 13705 Message: 13714

A while back, I modified a Simpson VTVM probe for use with a Fluke 8060A DMM. The standard 1 meg probe resistor was changed to a 10-meg, 1% metal film type. Then, a shunt at the DMM was made using two 1% resistors to get a value of 1.3 meg. All displayed DC voltage readings are then multipled by a factor of 10x. On the DMM, it's just a simple matter of mentally moving the decimal point over one place. To get the proper shunt value, I used a pot (configured as a rheostat) with a fixed resistor and dialed in the amount of resistance needed to create a precise 10:1 ratio.

The Simpson probe cable terminates into a male BNC connector. Since the Fluke portable DMMs use a standard 0.75" banana spacing, a BNC-to-dual banana adapter was used. A Pomona series adapter allows the user to add a perpendicular shunt with a dual banana plugged in sideways. So, apart from the probe resistor change and making a shunt network, no other work was required. The input Z at the probe is 10 meg, but now the probe isolates the DMM from the measured circuit. Switching to AC./Ohms is easy: Flip the probe switch and remove the shunt banana plug.

After that work, you might think it's used a lot, but I can't seem to break away from the VTVMs. It seems like gear of this vintage "needs" to be serviced with test equipment from that era!

Paul, W9AC

----- Original Message -----
From: Richard Knoppow
To: DrakeRadio@yahoogroups.com
Sent: Monday, May 13, 2013 3:19 PM
Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 13, 2013 9:37 AM
Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus
Digital Multi Meter DMM

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An example of a lab grade meter is the General Radio
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Most VTVM's had about 10 meg input resistance. Many
DMM's have the same resistance and will read the same as the
VTVM. Some VTVM's have much higher input resistance, for
example the Hewlett-Packard 410B or C or the -hp- 412A.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13715. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 20:33:24 UTC
From: Garey Barrell
Topic: 13705 Message: 13715

Paul -

Seems like a lot of work to modify a DMM which makes a LOUSY 'peak/dip' machine!! :-)

DMMs are kinda like digital radio frequency readouts..... Just because they have umpty-five digits doesn't mean you have to use them.....

Ham radio, the channelized radio service. What's really fun is listening to five of them argueing over which one of them is OFF frequency, when none of them are ON 'frequency'....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Christensen wrote:
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>
> Paul, W9AC
>
>
> ----- Original Message -----

> From: Richard Knoppow
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, May 13, 2013 3:19 PM
> Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM
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>
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> ----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, May 13, 2013 9:37 AM
> Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus
> Digital Multi Meter DMM
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> DMM's have the same resistance and will read the same as the
> VTVM. Some VTVM's have much higher input resistance, for
> example the Hewlett-Packard 410B or C or the -hp- 412A.
>
>

13716. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 20:43:33 UTC
From: vacuuminded2@...
Topic: 13705 Message: 13716

A lot of work for what you ultimately end up with, but an interesting idea none the less. The HP 410b/c and RCA Voltohmyst and other VTVM's are still common enough at hamfests for relatively little money, and can be electrically restored to work just as well, if not better than new for less than a new Fluke 77 would cost you. Sometimes there is just no substitution for a big analog meter scale, Hi-Z input or not.

No Garey, *I'm* right on freekency- My brandy new ICOM says so!

Regards,
Chris

Sent from my outdated iPhone wireless thingy

On May 13, 2013, at 3:33 PM, Garey Barrell <k4oah@...> wrote:

> Paul -
>
> Seems like a lot of work to modify a DMM which makes a LOUSY
> 'peak/dip' machine!! :-)
>
> DMMs are kinda like digital radio frequency readouts..... Just
> because they have umpty-five digits doesn't mean you have to use
> them.....
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> frequency, when none of them are ON 'frequency'....
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Paul Christensen wrote:
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DMMs use a standard 0.75" banana spacing, a BNC-to-dual banana adapter was used. A Pomona series adapter allows the user to add a perpendicular shunt with a dual banana plugged in sideways. So, apart from the probe resistor change and making a shunt network, no other work was required. The input Z at the probe is 10 meg, but now the probe isolates the DMM from the measured circuit. Switching to AC./Ohms is easy: Flip the probe switch and remove the shunt banana plug.
> >
> > After that work, you might think it's used a lot, but I can't seem to break away from the VTVMs. It seems like gear of this vintage "needs" to be serviced with test equipment from that era!
> >
> > Paul, W9AC
> >
> >
> > ----- Original Message -----
> > From: Richard Knoppow
> > To: DrakeRadio@yahoogroups.com
> > Sent: Monday, May 13, 2013 3:19 PM
> > Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM
> >
> >
> >
> >
> >
> > ----- Original Message -----
> > From: "Dan Galligan" <w3rxo@...>
> > To: <DrakeRadio@yahoogroups.com>
> > Sent: Monday, May 13, 2013 9:37 AM
> > Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus
> > Digital Multi Meter DMM
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> > > Garey,
> > > It sounds, from what you said, here, that one might be
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> > > willing to part with?
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> > > Dan
> > > W3RXO/W6
> > > Pomona, CA
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> > This depends on the particular VTVM, many were used
> > with plain leads especially those without built-in leads.
> > An example of a lab grade meter is the General Radio
> > 1800A/B.
> > Most VTVM's had about 10 meg input resistance. Many
> > DMM's have the same resistance and will read the same as the
> > VTVM. Some VTVM's have much higher input resistance, for
> > example the Hewlett-Packard 410B or C or the -hp- 412A.
> >
> >
>
>

[Non-text portions of this message have been removed]

13717. Re: [DrakeRadio] TR-4 PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 20:51:10 UTC
From: William Houghton
Topic: 13674 Message: 13717

Garey,

For the benefit of the rest of the group, mine is missing the 10 balls in the front race. None of my local ACE stores carry the 1/8 inch size. None of my hobby shops had any bearing balls.

I did find a vendor on ebay located in SoCal offering 100 pcs with free shipping. It was $5.80 with CA sales tax. My order has already been marked as shipped so should arrive on Wed or Thurs. I'll have plenty now. If anyone needs some, let me know -hihi.

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 11, 2013 1:58:41 PM
Subject: Re: [DrakeRadio] TR-4 PTO

Bill -

There is a hole in the back wall of the 'gearbox' to access an Allen setscrew. There is a clearance hole in the back end of 'some' covers, but if you've not been inside it's risky to go that way. Best to remove the cover so you can see!

Hopefully some gorilla hasn't broken the coil form loose!!!!

Tighten the setscrew only enough to take out any side to side play in the MAIN TUNING shaft. If the set screw has been loosened TOO much, the single ballbetween the end of the shaft and the screw. The balls in the front can also fall out if too loose.

There should be 10 balls, 1/8" dia steel (ACE or True Value) balls in the front race, and one at the back endof the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Picked up a TR-4 "parts rig" at an electronics flea market this morning (also
> got an MS-4 and an AC-3 in the deal). The PTO shaft has a lot of vertical play

> and some horiz play. Is it hosed or is this play adjustable/ repairable?
>
> 73,
>
> Bill
>

[Non-text portions of this message have been removed]

13718. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 20:59:45 UTC
From: Paul Christensen
Topic: 13705 Message: 13718

Garey,

I suppose this was a bit of a learning exercise to see if I could get it to work with a simple probe change and use of a shunt. But now, I have a non-standard probe that has to be tagged as such! Like many DMM's the 8060A has a quasi-analog bar graph, but by the time you're reached a peak/dip you've driven well past it before the meter responds.

BTW, last year I purchased a Keithley 6-1/2 digit bench DMM. Hate it. Way too many digits and non-intuitive. But it was deep discounted and just "had" to have it. Gullible me.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Monday, May 13, 2013 4:33 PM
Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Paul -

Seems like a lot of work to modify a DMM which makes a LOUSY
'peak/dip' machine!! :-)

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Paul Christensen wrote:
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> Paul, W9AC
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> ----- Original Message -----
> From: Richard Knoppow
> To: DrakeRadio@yahoogroups.com
> Sent: Monday, May 13, 2013 3:19 PM
> Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM
>
>
>
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> ----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Monday, May 13, 2013 9:37 AM
> Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus
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>

[Non-text portions of this message have been removed]

13719. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 21:28:23 UTC
From: Garey Barrell
Topic: 13705 Message: 13719

Paul -

There was a story in QST back in the 60's by John Troster, W6ISQ.
Actually there was a whole series of them, but I think this was my
favorite. I can't remember the name, but the tag line was 'love them
rippling dits'. Every time I hear 'too many digits' the line just
zips through my fevered brain!!! :-)

The man was a master story teller, and reflector of Ham 'lid'
operators........

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Paul Christensen wrote:
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> Paul, W9AC
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13720. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-13 21:53:25 UTC
From: Richard Knoppow
Topic: 13705 Message: 13720

----- Original Message -----
From: <vacuuminded2@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 13, 2013 1:43 PM
Subject: Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

>A lot of work for what you ultimately end up with, but an
>interesting idea none the less. The HP 410b/c and RCA
>Voltohmyst and other VTVM's are still common enough at
>hamfests for relatively little money, and can be
>electrically restored to work just as well, if not better
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>Sometimes there is just no substitution for a big analog
>meter scale, Hi-Z input or not.
>
> No Garey, *I'm* right on freekency- My brandy new ICOM
> says so!
>
> Regards,
> Chris

I acquired an old -hp- 410-B not too long ago.
Everything met specs, the only thing I did was to replace the selenium rectifier used for the low ohms range with a silicon diode. No other changes are necessary. This as an -hp- service note mod. The meter is the best for measuring really high impedance circuits like AVC. The 410-B has 122 megohm input resistance on all DC ranges. The DC probe has a 22 meg resistor in it near the tip. Another useful feature is its ability to measure very high resistance values. It goes high enough to test for leakage in capacitors. Mine is an early version with the rounded corner case, later ones had the shadow box type case, I don't know when the change was made. The -hp- 412-A millivoltmeter has an input resistance of 200 megohms and an even greater resistance range but is not as versitile as the 410-B. It has a 1 meg resistor in the tip of the DC voltage probe. The 410-B is an ideal instrument for working on tube transmitters and receivers.
The problem we had with the 412A at -hp- was the photo chopper. I don't know how well these have stood up. Other than that it was an accurate and reliable meter. If you have one beware that the insulation used on the range

switches is some strange low loss material that will melt
with most cleaning solvents.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13721. Re: TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 00:41:53 UTC
From: KA5DWI
Topic: 13670 Message: 13721

Hi Garey,
No capacitor is across the key terminals. What kind, value and/or voltage should I use? I have no problem when the key is unplugged.

Thanks for the info. I thought that might be the problem.

73s
Art KA5DWI

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Art -
>
> More information!!
>
> Does it occur with NO key plugged in?? If ONLY when a key is plugged
> in, does the key have a capacitor across it's terminals? The keying
> circuit is high impedance, it doesn't take much leakage to key it.
>
> First, make SURE your BIAS supply in the AC-3 isn't failing.... You
> should see a stable -60 or so volts on the buss. Complete failure of
> this supply dueto leaky filter capacitors or bad diodes, can cause
> catastrophic failure (destruction!) of the TR-3 and AC-3. Do NOT
> leave the transceiver ON and unattended (even in standby) until that
> supply is stable.
>
> Could be a gassy V4 or V6.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> KA5DWI wrote:
> > Hi all,
> > I need some help. There is something I am missing somewhere, but can't seem to recall how to fix it.
> >
> > When I hook up a straight key to my TR3, I am setting a carrier out when the key is not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
> >
> > The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.
> >

> > I am not sure if the same problem exists if I hook up my electronic keyer.
> >
> > Thanks. I appreciate any advice.
> >
> > 73s
> > Art KA5DWI
> >

13722. Re: [DrakeRadio] Re: TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 01:58:12 UTC
From: Garey Barrell
Topic: 13670 Message: 13722

Art -

You don't need a cap across the key. Some put caps across keys for
various reasons, and a leaky cap could present as you describe.

Is the key body itself clean and dry, especially around the contact
area.??? Are the connections inside thekey jack insulated from each
other?

You could try just plugging in an 'empty' key plug. If it still keys,
you may have a gassy V4 or V6.

The circuit is a 3.3M resistor from the -60 VDC bus to the ungrounded
key terminal. A 47k and 330k resistor in series go from the ungrounded
key terminal to the Grid of V4, and a 68k and 15 ohm in series gofrom
the ungrounded key terminal to the Grid of V6. When the key is UP,
-60V is applied to the Grids of V4 and V6, cutting off both stages.
When the key is pressed, the grids go to a low dc voltage based on the
grid resistors, allowing the stages to amplify. A gassy tube is a tube
whose Grid loses ability to cut off the current flow as it heats up,
which could result in what you describe. The only way to test is with
substitution of a good tube.

Let us know what you find!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

KA5DWI wrote:
> Hi Garey,
> No capacitor is across the key terminals. What kind, value and/or voltage should I use? I
have no problem when the key is unplugged.
>
> Thanks for the info. I thought that might be the problem.
>
> 73s
> Art KA5DWI
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Art -
>>
>> More information!!
>>

>> Does it occur with NO key plugged in?? If ONLY when a key is plugged
>> in, does the key have a capacitor across it's terminals? The keying
>> circuit is high impedance, it doesn't take much leakage to key it.
>>
>> First, make SURE your BIAS supply in the AC-3 isn't failing.... You
>> should see a stable -60 or so volts on the buss. Complete failure of
>> this supply dueto leaky filter capacitors or bad diodes, can cause
>> catastrophic failure (destruction!) of the TR-3 and AC-3. Do NOT
>> leave the transceiver ON and unattended (even in standby) until that
>> supply is stable.
>>
>> Could be a gassy V4 or V6.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> KA5DWI wrote:
>>> Hi all,
>>> I need some help. There is something I am missing somewhere, but can't seem to recall
how to fix it.
>>>
>>> When I hook up a straight key to my TR3, I am setting a carrier out when the key is not
depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the
carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
>>>
>>> The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.
>>>
>>> I am not sure if the same problem exists if I hook up my electronic keyer.
>>>
>>> Thanks. I appreciate any advice.
>>>
>>> 73s
>>> Art KA5DWI
>>>
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> Yahoo! Groups Links
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13723. Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 11:59:57 UTC
From: slowcountry1
Topic: 13702 Message: 13723

Garey,

Specifically, I would like to have a band scope, like some of the newer rigs have such that I can see signals on a given band. One, so that I can see a signal of possible interest and move to that frequency to have a QSO and Two because there are a bunch of interference around my location, leaking cable TV and other stuff that I do not have a clue yet as to what it is.

I thought maybe someone had made an older, stand alone scope that could be attached to a coax and used to see what was in the spectrum. The SDR looks like a cheap way to do it. I looked up the site that you referenced, I was wondering how well their software worked or if there was a better program that someone would recommend. Will a standard sound card suffice for its operation and is there any other hardware needed to operate SDR?

Do you use an antenna connected to your transceiver and then somehow switch it out during transmit or do you have an antenna dedicated to the SDR? I only have a 5BTV capable of listening to the low bands at the moment. If it is not feasible to share an antenna and switch out the SDR on transmit, then I will have to figure out what to use for a receiving antenna.

I also thought it would be interesting to monitor my transmitted signal. Maybe learn something in the process and ensure carrier suppression etc.

SDR kind of defeats the purpose of operating a vintage station however; it may prove to be very interesting and inexpensive to get into.

Thanks,

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I'm not sure I follow what you are looking for.
>
> A 'separate' band monitor is easy, the 'Five Dash, Inc.' Ensemble II
> SDR receiver ~ $75 kit with case, is a great receiver, 0-30 MHz. It
> does require a PC though. You can view up to 90 kHz anywhere in the
> range. All signal processing is done at audio frequencies in the PC,
> all modes, IF bandwidths, detectors, AVC, audio, etc. If you just want
> to play, a 'single band' (160-20M) version is ~$20.
>
> Some have taken a single band version tuned to the IF of a
> conventional radio as a band scope. This has limited value with
> today's radios, since all have some sort of 'roofing filter' very
> early in the circuit. For example, the 4 Line receivers have an 8 kHz

> wide filter right after the second mixer, making that the widest your
> band scope can cover. If you put it there, then all you are using of
> the conventional radio is the frequency conversion 'front end' to
> convert 0-30 MHz down to 5.645 MHz +/- 4 kHz. Not real useful.
>
> ???
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > All,
> >
> > I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
> >
> > Thanks,
> >
> > Doug - N9XTF
> >
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> > Yahoo! Groups Links
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13724. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 13:02:31 UTC
From: Paul Christensen
Topic: 13702 Message: 13724

Doug,

Placing the SDR after the first mixer "would" have worked but for Drake's superb RF engineering; they placed a highly selective preselector ahead of it. Post 1st mixer, the result is a display that shows a "hump," and becomes more evident on the lower HF bands.

I don't think a small, shielded RF relay (e.g., Teledyne) for preselctor bypassing would work either. The preselector is ganged at several places, one of them being at the antenna input ahead of the RF amp. One could try a relay bypass from the antenna to the first mixer but signals above 20m would be weak relative to the noise floor and the first mixer would have zero selectivity against out of band sources, like nearby high power AM-BC stations. Yep, it's a tough one to solve.

Paul, W9AC

----- Original Message -----
From: slowcountry1
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, May 14, 2013 7:59 AM
Subject: [DrakeRadio] Re: Stand alone spectrum display

Garey,

Specifically, I would like to have a band scope, like some of the newer rigs have such that I can see signals on a given band. One, so that I can see a signal of possible interest and move to that frequency to have a QSO and Two because there are a bunch of interference around my location, leaking cable TV and other stuff that I do not have a clue yet as to what it is.

I thought maybe someone had made an older, stand alone scope that could be attached to a coax and used to see what was in the spectrum. The SDR looks like a cheap way to do it. I looked up the site that you referenced, I was wondering how well their software worked or if there was a better program that someone would recommend. Will a standard sound card suffice for its operation and is there any other hardware needed to operate SDR?

Do you use an antenna connected to your transceiver and then somehow switch it out during transmit or do you have an antenna dedicated to the SDR? I only have a 5BTV capable of listening to the low bands at the moment. If it is not feasible to share an antenna and switch out the SDR on transmit, then I will have to figure out what to use for a receiving antenna.

I also thought it would be interesting to monitor my transmitted signal. Maybe learn something in the process and ensure carrier suppression etc.

SDR kind of defeats the purpose of operating a vintage station however; it may prove to be very interesting and inexpensive to get into.

Thanks,

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doug -
>
> I'm not sure I follow what you are looking for.
>
> A 'separate' band monitor is easy, the 'Five Dash, Inc.' Ensemble II
> SDR receiver ~ $75 kit with case, is a great receiver, 0-30 MHz. It
> does require a PC though. You can view up to 90 kHz anywhere in the
> range. All signal processing is done at audio frequencies in the PC,
> all modes, IF bandwidths, detectors, AVC, audio, etc. If you just want
> to play, a 'single band' (160-20M) version is ~$20.
>
> Some have taken a single band version tuned to the IF of a
> conventional radio as a band scope. This has limited value with
> today's radios, since all have some sort of 'roofing filter' very
> early in the circuit. For example, the 4 Line receivers have an 8 kHz
> wide filter right after the second mixer, making that the widest your
> band scope can cover. If you put it there, then all you are using of
> the conventional radio is the frequency conversion 'front end' to
> convert 0-30 MHz down to 5.645 MHz +/- 4 kHz. Not real useful.
>
> ???
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> slowcountry1 wrote:
> > All,
> >
> > I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
> >
> > Thanks,
> >
> > Doug - N9XTF
> >
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> > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13725. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 14:36:21 UTC
From: Garey Barrell
Topic: 13702 Message: 13725

Doug -

There are various units around, essentially what you are asking for is a 'spectrum analyzer'. Heathkit offered the 'HamScan' back in the 60's, same package as the 'Monitorscope'. I don't recall the specifics, I never owned one, but basically it tapped off of the IF of the receiver and displayed a representation of the spectrum seen by the receiver, BEFORE the IF selectivity was applied. So typically you could see 10, 15, 20 kHz either side of the tuned frequency.

Later, Kenwood offered the SB-220 for use with the TS-940 in the early 80's and it worked pretty well, but again was limited by the bandwidth of the front end of the receiver. These all worked best when used with receivers _without_ 'roofing filters' to give the widest view possible. Judging from the cost of 'new' radios, I suspect they have a separate receiver channel with a bandwidth of 100 kHz or so, not for listening, just to drive the display. Without much thought, that's where I would start as an engineer with an unlimited budget! :-)

The little Ensemble II SDR receiver is a real doll. It's smaller than a paper-back book. It has an12VDC input, a 'stereo' audio out to the computer, aUSB port to the computer, and an antenna connector. The software is adapted from the best commercial SDR product, the Flex radios. Your monitor becomes a front panel, complete with gain, bandwidth, detector, S-Meter, etc.There is a transceiver version, in the same cabinet!,) for about $20 or so more, 1W SSB/CW..... All are kits, which only adds to the fun!! :-)

The documentation is fabulous, all on WB5RVZ. There is a Yahoo group, Softrock, with plenty of support, both concrete and existential!

Computer sound cards are a whole separate article, and definitely affect the quality of the receiver. Makes sense, since ALL signal manipulation is done at audio frequencies. Most modern PC cards are at least adequate, the primary requirement is that it have a stereo (two-channel) microphone or auxiliary input. This eliminates many laptops.

All that said, SDR has limitations. Having a 'wide open' front end makes it less than great in crowded band conditions. Although it has DSP IF bandwidths down to 25 Hz, there is no 'roofing filter', the 0 - 30 range has only four band filters. But it does surprisingly well in contest conditions.

There used to be demonstration recordings that would allow you to download and install the software (Free) and then 'play' audio recorded samples of on the air activity, during a contest. You can

tune from signal to signal, just like using a real receiver. I don't know if those are still available, but a Google search might turn them up. Another feature of the software allows you to make your own recordingsat the 'push of a button' on screen!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Garey,
>
> Specifically, I would like to have a band scope, like some of the newer rigs have such that I can see signals on a given band. One, so that I can see a signal of possible interest and move to that frequency to have a QSO and Two because there are a bunch of interference around my location, leaking cable TV and other stuff that I do not have a clue yet as to what it is.
>
> I thought maybe someone had made an older, stand alone scope that could be attached to a coax and used to see what was in the spectrum. The SDR looks like a cheap way to do it. I looked up the site that you referenced, I was wondering how well their software worked or if there was a better program that someone would recommend. Will a standard sound card suffice for its operation and is there any other hardware needed to operate SDR?
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> Do you use an antenna connected to your transceiver and then somehow switch it out during transmit or do you have an antenna dedicated to the SDR? I only have a 5BTV capable of listening to the low bands at the moment. If it is not feasible to share an antenna and switch out the SDR on transmit, then I will have to figure out what to use for a receiving antenna.
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> I also thought it would be interesting to monitor my transmitted signal. Maybe learn something in the process and ensure carrier suppression etc.
>
> SDR kind of defeats the purpose of operating a vintage station however; it may prove to be very interesting and inexpensive to get into.
>
> Thanks,
>
> Doug - N9XTF
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doug -
>>
>> I'm not sure I follow what you are looking for.
>>
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>> SDR receiver ~ $75 kit with case, is a great receiver, 0-30 MHz. It
>> does require a PC though. You can view up to 90 kHz anywhere in the

>> range. All signal processing is done at audio frequencies in the PC,
>> all modes, IF bandwidths, detectors, AVC, audio, etc. If you just want
>> to play, a 'single band' (160-20M) version is ~$20.
>>
>> Some have taken a single band version tuned to the IF of a
>> conventional radio as a band scope. This has limited value with
>> today's radios, since all have some sort of 'roofing filter' very
>> early in the circuit. For example, the 4 Line receivers have an 8 kHz
>> wide filter right after the second mixer, making that the widest your
>> band scope can cover. If you put it there, then all you are using of
>> the conventional radio is the frequency conversion 'front end' to
>> convert 0-30 MHz down to 5.645 MHz +/- 4 kHz. Not real useful.
>>
>> ???
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>>> All,
>>>
>>> I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
>>>
>>> Thanks,
>>>
>>> Doug - N9XTF
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13726. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 20:47:43 UTC
From: Richard Knoppow
Topic: 13702 Message: 13726

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, May 14, 2013 7:36 AM
Subject: Re: [DrakeRadio] Re: Stand alone spectrum display

> Doug -
>
> There are various units around, essentially what you are
> asking for is
> a 'spectrum analyzer'. Heathkit offered the 'HamScan'
> back in the
> 60's, same package as the 'Monitorscope'. I don't recall
> the
> specifics, I never owned one, but basically it tapped off
> of the IF of
> the receiver and displayed a representation of the
> spectrum seen by
> the receiver, BEFORE the IF selectivity was applied. So
> typically you
> could see 10, 15, 20 kHz either side of the tuned
> frequency.
>
Snipping....

Probably the oldest display was the Panadaptor, these were made in various models to work with communications receivers. I think the first ones appeared about 1940 but have not researched it carefully. The Panadaptor was a rudimentary spectrum analyzer and had all the limitations the snipped part of the above post talks about. Panadaptors were used by the military for ECM, finding and identifying radar transmissions, etc. The S-27/S-36 and also the SX-28 were available with connectors for Panadaptors and I think Hallicrafters eventually bought the company.
None of these is a true wide-band spectrum analyzer but can give some idea of what is surrounding the received frequency. I think anyone who wants a true spectrum analyzer should get a stand alone unit to couple to the receiving antenna. It would be advantageous to have a marker of some sort for the receiver frequency. I don't know how to do this but someone here probably does.
Unfortunately just coupling crude tuner to a conventional receiver is not very satisfactory. I have not looked at the circuits of the expensive rice-boxes but suspect the

spectrum analyzer function is made separate from the
receiver part possibly a whole separate receiver.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13727. Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 22:35:58 UTC
From: qrper
Topic: 13727 Message: 13727

Gang....

I thought I let everyone know that I'll have plenty of AC4R power supply kits at dayton.

Normally, they're $65 +$8 shipping

three days only $60 and of course there's no shipping

I'll be at the same place I've been for the last 20+ years

sites 509 and 510.

If nothing else, stop by and say hello

mike, wb8vge

13728. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 22:49:24 UTC
From: Ian Wilson
Topic: 13702 Message: 13728

One neat thing about the classic Panadapt{o,e}r is that it used an overcoupled tuned network to provide an amplitude response that was approximately the inverse of the response of the receiver. This flattened out the signals across the band of interest.

73, ian K3IMW

On Tue, May 14, 2013 at 1:47 PM, Richard Knoppow <1oldlens1@...>wrote:

> **
>
>
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Tuesday, May 14, 2013 7:36 AM
> Subject: Re: [DrakeRadio] Re: Stand alone spectrum display
>
> > Doug -
> >
> > There are various units around, essentially what you are
> > asking for is
> > a 'spectrum analyzer'. Heathkit offered the 'HamScan'
> > back in the
> > 60's, same package as the 'Monitorscope'. I don't recall
> > the
> > specifics, I never owned one, but basically it tapped off
> > of the IF of
> > the receiver and displayed a representation of the
> > spectrum seen by
> > the receiver, BEFORE the IF selectivity was applied. So
> > typically you
> > could see 10, 15, 20 kHz either side of the tuned
> > frequency.
> >
> Snipping....
>
> Probably the oldest display was the Panadaptor, these
> were made in various models to work with communications
> receivers. I think the first ones appeared about 1940 but
> have not researched it carefully. The Panadaptor was a
> rudimentary spectrum analyzer and had all the limitations
> the snipped part of the above post talks about. Panadaptors
> were used by the military for ECM, finding and identifying
> radar transmissions, etc. The S-27/S-36 and also the SX-28

> were available with connectors for Panadaptors and I think
> Hallicrafters eventually bought the company.
> None of these is a true wide-band spectrum analyzer but
> can give some idea of what is surrounding the received
> frequency. I think anyone who wants a true spectrum
> analyzer should get a stand alone unit to couple to the
> receiving antenna. It would be advantageous to have a marker
> of some sort for the receiver frequency. I don't know how to
> do this but someone here probably does.
> Unfortunately just coupling crude tuner to a conventional
> receiver is not very satisfactory. I have not looked at the
> circuits of the expensive rice-boxes but suspect the
> spectrum analyzer function is made separate from the
> receiver part possibly a whole separate receiver.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>

[Non-text portions of this message have been removed]

13729. TR7 band switching problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 23:58:57 UTC
From: k2gtm1
Topic: 13729 Message: 13729

Hello all!

I've been dreaming about owning a TR7 for decades, and I finally got an excellent-condition one with all the bells and whistles (PS7, NB7, DR7, AUX7, FA7, SL-300, SL-500, SL-1800). Best part, the price was very reasonable! :)

Unfortunately, it has/had some issues I'm working on:
- There was no speaker audio. Caused by a bad LM380 audio amp chip.
- Intermittents. I cleaned all of the Molex pins and re-soldered them to the boards.
- A strange issue with band selection: I haven't been able to figure this out yet and I'm hoping someone can help...

The radio will not tune above the 23.5 MHz segment. Also, the segments are out-of order when going through them using the DR7 UP/DOWN buttons. Here are the frequencies I get when the PTO dial is set to 0 00 for each band switch position and DR7 step:

BAND SWITCH // # of STEPS // FREQUENCIES
1.5 - 2 // 1 // 1.5
2 - 3 // 2 // 2, 2.5
3 - 4.5 // 3 // 3, *2.5, 3
4.5 - 7 // 5 // 3.5, 4, 4.5, 5, 5.5
7 - 10 // 6 // 6, 6.5, 7, *6.5, 7, 7.5
10 - 15 // 10 // 8, 8.5, 9, 9.5, 10, 10.5, 11, *10.5, 11, 11.5
15 - 22 // 14 // 12, 12.5, 13, 13.5, 14, 14.5, 15, *14.5, 15, 15.5, 16, 16.5, 17, 17.5
22 - 30 // 16 // 18, 18.5, 19, *18.5, 19, 19.5, 20, 20.5, 21, 21.5, 22, 22.5, 23, *22.5, 23, 23.5

(* denotes where "step-backs" occur, even when pressing UP)

Hopefully this makes sense!

Here's what I've figured out so far:
- The DR7 UP/DOWN buttons work correctly and the PROM chip correctly prevents the user from going too high or too low within the band selected.
- The number of 500 kHz steps selectable within each band is correct.
- U9005(LSD) and U9006(MSD) on DR7 are loading the correct values into the translator board (i.e. "83" for 1.5 MHz and "27" for 29.5 MHz).
- The radio transmits and receives properly on the displayed frequencies. (The radio is trying to get to the correct 500 kHz segments, but can't.)

SO, I've gone as far as I can considering I don't have any extender boards to test the translator board (and especially the divide-by-n circuit) directly. I'm guessing it must be one of the ICs in that circuit that isn't working correctly. I could just replace all four of the ICs, but I'd rather know exactly what the bad part is.

Does anyone have any idea what would be causing this mess?? Also, would anyone be willing to lend me a working translator board so I can try it in my TR7? Your help will be GREATLY

appreciated!

I'm in love with this radio - even if it doesn't work right!! :)

Thanks and 73,
-Greg K2GTM

13730. Re: [DrakeRadio] Re: Stand alone spectrum display

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 00:39:53 UTC
From: Jim Shorney
Topic: 13702 Message: 13730

Doug,

Here's my plan, which may give you some ideas. The Drake TR-7 has a REC ANT loop on the back, mainly used to feed the RX antenna line after the low pass filters to and from an R-7 receiver. With no R-7, these connections are jumpered. I also have a vintage Ameco tube preamp/preselector with an auxiliary receiver port. I plan to break the loop and insert the Ameco inline at thsi point, and feed an R820 SDR dongle from the auxiliary port. I expect some of the hump effect from the preselector, but I don't think it is exceptionally sharp on the Ameco. We'll see. Part of my reasoning for doing it this way is that the Ameco will not need to T/R switch in this configuration; in my particular case it will also act to overcome the ~3 dB hit from the antenna splitter in my R-7A.

-Jim
NU0C

On Tue, 14 May 2013 11:59:57 -0000, slowcountry1 wrote:

>Garey,
>
>Specifically, I would like to have a band scope, like some of the newer rigs have such that I can see signals on a given band. One, so that I can see a signal of possible interest and move to that frequency to have a QSO and Two because there are a bunch of interference around my location, leaking cable TV and other stuff that I do not have a clue yet as to what it is.
>
>I thought maybe someone had made an older, stand alone scope that could be attached to a coax and used to see what was in the spectrum. The SDR looks like a cheap way to do it. I looked up the site that you referenced, I was wondering how well their software worked or if there was a better program that someone would recommend. Will a standard sound card suffice for its operation and is there any other hardware needed to operate SDR?
>
>Do you use an antenna connected to your transceiver and then somehow switch it out during transmit or do you have an antenna dedicated to the SDR? I only have a 5BTV capable of listening to the low bands at the moment. If it is not feasible to share an antenna and switch out the SDR on transmit, then I will have to figure out what to use for a receiving antenna.
>
>I also thought it would be interesting to monitor my transmitted signal. Maybe learn something in the process and ensure carrier suppression etc.
>
>SDR kind of defeats the purpose of operating a vintage station however; it may prove to be very interesting and inexpensive to get into.
>
>Thanks,

>
>Doug - N9XTF
>
>--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>
>> Doug -
>>
>> I'm not sure I follow what you are looking for.
>>
>> A 'separate' band monitor is easy, the 'Five Dash, Inc.' Ensemble II
>> SDR receiver ~ $75 kit with case, is a great receiver, 0-30 MHz. It
>> does require a PC though. You can view up to 90 kHz anywhere in the
>> range. All signal processing is done at audio frequencies in the PC,
>> all modes, IF bandwidths, detectors, AVC, audio, etc. If you just want
>> to play, a 'single band' (160-20M) version is ~$20.
>>
>> Some have taken a single band version tuned to the IF of a
>> conventional radio as a band scope. This has limited value with
>> today's radios, since all have some sort of 'roofing filter' very
>> early in the circuit. For example, the 4 Line receivers have an 8 kHz
>> wide filter right after the second mixer, making that the widest your
>> band scope can cover. If you put it there, then all you are using of
>> the conventional radio is the frequency conversion 'front end' to
>> convert 0-30 MHz down to 5.645 MHz +/- 4 kHz. Not real useful.
>>
>> ???
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> slowcountry1 wrote:
>> > All,
>> >
>> > I would like to add a stand alone band scope to monitor signals on the band that the rig is currently tuned to. I have seen some that are using an SDR radio. Does anyone do this with any of the Drake Transceivers and if so, what are some good options? I would like to do it without a PC but from what I've seen this may be impossible. I would like to also possibly monitor my transmitted signal if possible. This is not by any means a necessity for me but something I would like to have.
>> >
>> > Thanks,
>> >
>> > Doug - N9XTF
>> >
>> >
>> >

>> > ------------------------------------
>> >
>> > Yahoo! Groups Links
>> >
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>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13731. R-4B Calibrator Mystery Solved!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 00:59:03 UTC
From: Steve Wedge
Topic: 13731 Message: 13731

This simple circuit was kicking my butt, so I had to assume that more than one thing was wrong with it - especially since (a) it didn't work when I got the receiver, after (b) the previous owner had obviously removed it and worked on it. During that process, the PO created other problems, such as shorting the replacement crystal case to the feedthrough where the jumper connects 25 kHz to the 0.001 uf cap plus a couple of other sloppy solder joints.

After replacing the electrolytic with Hayseed's 200 uf part from the kit, I was still getting very erratic delayed or no starts of the calibrator. I had already noticed that the trimmer capacitor did not change the frequency and the calibrator frequency was definitely off-frequency. I discovered tonight that the oscillator wouldn't start at all anymore - unless I would touch it with a scope probe.

I increased the tension on the trimmer cap rotor (it was obvious that someone had messed with it). Nada. I then metered out the connection from the crystal/FET junction to the trimmer. No connection. Bingo!

There was an invisible break in the etch - I reflowed solder along its length and that did the trick.

Tomorrow, I start the refurb and replace the can capacitor - assuming I'm not in the middle of any real estate happenings ;-)

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!

[Non-text portions of this message have been removed]

13732. Re: [DrakeRadio] Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 01:00:49 UTC
From: Steve Wedge
Topic: 13727 Message: 13732

Glad to see these are back, Mike!

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: qrper
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, May 14, 2013 6:35 PM
Subject: [DrakeRadio] Dayton

Gang....

I thought I let everyone know that I'll have plenty of AC4R power supply kits at dayton.

Normally, they're $65 +$8 shipping

three days only $60 and of course there's no shipping

I'll be at the same place I've been for the last 20+ years

sites 509 and 510.

If nothing else, stop by and say hello

mike, wb8vge

[Non-text portions of this message have been removed]

13733. Re: [DrakeRadio] TR7 band switching problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 01:25:20 UTC
From: Jim Shorney
Topic: 13729 Message: 13733

Greg,

Sounds like you are on the right track. More comments below:

On Tue, 14 May 2013 23:58:57 -0000, k2gtm1 wrote:

>- Intermittents. I cleaned all of the Molex pins and re-soldered them to the boards.

Did you check the female connectors on the translator board? They could need cleaning or re-tensioning.

>SO, I've gone as far as I can considering I don't have any extender boards to test the translator board (and especially the divide-by-n circuit) directly. I'm guessing it must be one of the ICs in that circuit that isn't working correctly. I could just replace all four of the ICs, but I'd rather know exactly what the bad part is.

You should be able to figure out which divider is bad by comparing the BCD code that you are presenting to the board vs. the BCD code for the band you are actually getting. I imagine the J-Ks and ANDs are working fine, or you wouldn't be getting any bands.

Bob, W7AVK, used to offer a nice extender board repro. I don't know if he still does, but here's his info:

http://www.wb4hfn.com/Services/W7AVK/tr7ext2.htm

>Does anyone have any idea what would be causing this mess?? Also, would anyone be willing to lend me a working translator board so I can try it in my TR7? Your help will be GREATLY appreciated!

The boards show up on that popular auction site for not a lot of money. I see three there right now for 35 bucks.

>I'm in love with this radio - even if it doesn't work right!! :)

Welcome to the addiction.

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13734. Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 02:13:51 UTC
From: Paul Kraemer
Topic: 13727 Message: 13734

Just wanted to let everyone know that due to a conflictual family even in another part of the country I won't be able to be at Dayton but my presence will be.
I invite you to stop by the Drake forum and possibly win one of my superb ES4AC-4 rebuild kits for FREE.
Even if you don't win the door prize you can still be a winner with one of our in stock kits. Assembled and tested ready for EZ installation only $49.95 (no matter where you buy it).
Paul K0UYA
Electronic Specialties
Specialists in industrial control for over 40 years

13735. Re: TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 02:45:24 UTC
From: KA5DWI
Topic: 13670 Message: 13735

Hi Garey,

Thanks for the feedback.
I plugged in an "empty" key plug and still had the carrier. I also plugged in my electronic keyer and had the same result. The rig is clean and free of any debris (dust), loose solder or moisture.

Therefore, I will replace V4 and V6. Know any reliable and inexpensive sources for a 6HS6 Mixer and a 12Y7A Driver tube?

The source here in Dallas/Ft Worth wants a small fortune and driving around among the road construction here offsets shipping fees :)

Thanks again,
Art KA5DWI nr. Ft Worth TX

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Art -
>
> You don't need a cap across the key. Some put caps across keys for
> various reasons, and a leaky cap could present as you describe.
>
> Is the key body itself clean and dry, especially around the contact
> area.??? Are the connections inside thekey jack insulated from each
> other?
>
> You could try just plugging in an 'empty' key plug. If it still keys,
> you may have a gassy V4 or V6.
>
> The circuit is a 3.3M resistor from the -60 VDC bus to the ungrounded
> key terminal. A 47k and 330k resistor in series go from the ungrounded
> key terminal to the Grid of V4, and a 68k and 15 ohm in series gofrom
> the ungrounded key terminal to the Grid of V6. When the key is UP,
> -60V is applied to the Grids of V4 and V6, cutting off both stages.
> When the key is pressed, the grids go to a low dc voltage based on the
> grid resistors, allowing the stages to amplify. A gassy tube is a tube
> whose Grid loses ability to cut off the current flow as it heats up,
> which could result in what you describe. The only way to test is with
> substitution of a good tube.
>
> Let us know what you find!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> KA5DWI wrote:
> > Hi Garey,
> > No capacitor is across the key terminals. What kind, value and/or voltage should I use? I have no problem when the key is unplugged.
> >
> > Thanks for the info. I thought that might be the problem.
> >
> > 73s
> > Art KA5DWI
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Art -
> >>
> >> More information!!
> >>
> >> Does it occur with NO key plugged in?? If ONLY when a key is plugged
> >> in, does the key have a capacitor across it's terminals? The keying
> >> circuit is high impedance, it doesn't take much leakage to key it.
> >>
> >> First, make SURE your BIAS supply in the AC-3 isn't failing.... You
> >> should see a stable -60 or so volts on the buss. Complete failure of
> >> this supply dueto leaky filter capacitors or bad diodes, can cause
> >> catastrophic failure (destruction!) of the TR-3 and AC-3. Do NOT
> >> leave the transceiver ON and unattended (even in standby) until that
> >> supply is stable.
> >>
> >> Could be a gassy V4 or V6.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> KA5DWI wrote:
> >>> Hi all,
> >>> I need some help. There is something I am missing somewhere, but can't seem to recall how to fix it.
> >>>
> >>> When I hook up a straight key to my TR3, I am setting a carrier out when the key is not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
> >>>
> >>> The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.

> >>>
> >>> I am not sure if the same problem exists if I hook up my electronic keyer.
> >>>
> >>> Thanks. I appreciate any advice.
> >>>
> >>> 73s
> >>> Art KA5DWI
> >>>
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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13736. Re: [DrakeRadio] Re: TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 03:00:22 UTC
From: Garey Barrell
Topic: 13670 Message: 13736

Art -

Yes, the 6HS6 is an expensive tube. $15-20 is not uncommon. The 12BY7 isn't cheap either, probably more in the $10-12 range.

Check with<http://www.esrcvacuumtubes.com/>. There are manyothers, but I have been dealing with Stan for a long time and he is reliable. Specify US made, RCA, Sylvania, Zenith, GE, etc.

Ifyou have a VTVM or high impedance DMM you could measure the grid voltage on both those stages with the key up and see if either one drifts up (less negative voltage). I would expect to see -20 to -30 V in CW MODE with KEY UP. You could start by just measuring the voltage across the key terminals in CW, KEY UP. It should read about -60 VDC unless the meter is low-Z like one of the Harbor Freight 'bargain' types. Any good DMM should be 10M or greater input impedance and read about -60 VDCacross the open key.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

KA5DWI wrote:
> Hi Garey,
>
> Thanks for the feedback.
> I plugged in an "empty" key plug and still had the carrier. I also plugged in my electronic keyer and had the same result. The rig is clean and free of any debris (dust), loose solder or moisture.
>
> Therefore, I will replace V4 and V6. Know any reliable and inexpensive sources for a 6HS6 Mixer and a 12Y7A Driver tube?
>
> The source here in Dallas/Ft Worth wants a small fortune and driving around among the road construction here offsets shipping fees :)
>
> Thanks again,
> Art KA5DWI nr. Ft Worth TX
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Art -
>>

>> You don't need a cap across the key. Some put caps across keys for
>> various reasons, and a leaky cap could present as you describe.
>>
>> Is the key body itself clean and dry, especially around the contact
>> area.??? Are the connections inside thekey jack insulated from each
>> other?
>>
>> You could try just plugging in an 'empty' key plug. If it still keys,
>> you may have a gassy V4 or V6.
>>
>> The circuit is a 3.3M resistor from the -60 VDC bus to the ungrounded
>> key terminal. A 47k and 330k resistor in series go from the ungrounded
>> key terminal to the Grid of V4, and a 68k and 15 ohm in series gofrom
>> the ungrounded key terminal to the Grid of V6. When the key is UP,
>> -60V is applied to the Grids of V4 and V6, cutting off both stages.
>> When the key is pressed, the grids go to a low dc voltage based on the
>> grid resistors, allowing the stages to amplify. A gassy tube is a tube
>> whose Grid loses ability to cut off the current flow as it heats up,
>> which could result in what you describe. The only way to test is with
>> substitution of a good tube.
>>
>> Let us know what you find!!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> KA5DWI wrote:
>>> Hi Garey,
>>> No capacitor is across the key terminals. What kind, value and/or voltage should I use?
I have no problem when the key is unplugged.
>>>
>>> Thanks for the info. I thought that might be the problem.
>>>
>>> 73s
>>> Art KA5DWI
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> Art -
>>>>
>>>> More information!!
>>>>
>>>> Does it occur with NO key plugged in?? If ONLY when a key is plugged
>>>> in, does the key have a capacitor across it's terminals? The keying
>>>> circuit is high impedance, it doesn't take much leakage to key it.
>>>>
>>>> First, make SURE your BIAS supply in the AC-3 isn't failing.... You

>>>> should see a stable -60 or so volts on the buss. Complete failure of
>>>> this supply dueto leaky filter capacitors or bad diodes, can cause
>>>> catastrophic failure (destruction!) of the TR-3 and AC-3. Do NOT
>>>> leave the transceiver ON and unattended (even in standby) until that
>>>> supply is stable.
>>>>
>>>> Could be a gassy V4 or V6.
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> KA5DWI wrote:
>>>>> Hi all,
>>>>> I need some help. There is something I am missing somewhere, but can't seem to recall
how to fix it.
>>>>>
>>>>> When I hook up a straight key to my TR3, I am setting a carrier out when the key is
not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down,
the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
>>>>>
>>>>> The TR3 is a lousy CW rig, but would like to play with it on "boat anchor"
activities.
>>>>>
>>>>> I am not sure if the same problem exists if I hook up my electronic keyer.
>>>>>
>>>>> Thanks. I appreciate any advice.
>>>>>
>>>>> 73s
>>>>> Art KA5DWI
>>>>>
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> Yahoo! Groups Links
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13737. Re: [DrakeRadio] Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 05:06:24 UTC
From: Dan Galligan
Topic: 13727 Message: 13737

As the happy owner, and installer, of 3, of Paul's ESAC-4 kits, as well as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R kit, is a good design, but I am far happier, with Paul's ESAC-4 kits. They install easier, and they have a cleaner "Look" to them. You will be very pleased with one, should you acquire it. I recommend his design, highly.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:

> Just wanted to let everyone know that due to a conflictual family even in
> another part of the country I won't be able to be at Dayton but my presence
> will be.
> I invite you to stop by the Drake forum and possibly win one of my superb
> ES4AC-4 rebuild kits for FREE.
> Even if you don't win the door prize you can still be a winner with one of
> our in stock kits. Assembled and tested ready for EZ installation only
> $49.95 (no matter where you buy it).
> Paul K0UYA
> Electronic Specialties
> Specialists in industrial control for over 40 years
>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13738. Re: [DrakeRadio] R-4B Calibrator Mystery Solved!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 13:55:39 UTC
From: Garey Barrell
Topic: 13731 Message: 13738

Steve -

Good job!! The simplest ones can sometimes be the toughest..... I have a small high intensity Maglite that I used behind PC boards to look for breaks. I have to admit though that it would have taken me a while to get to that point!! :-)

But it IS satisfying when you finally find all the little 'presents' left by your predecessor(s)!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> This simple circuit was kicking my butt, so I had to assume that more than one thing was wrong with it - especially since (a) it didn't work when I got the receiver, after (b) the previous owner had obviously removed it and worked on it. During that process, the PO created other problems, such as shorting the replacement crystal case to the feedthrough where the jumper connects 25 kHz to the 0.001 uf cap plus a couple of other sloppy solder joints.
>
> After replacing the electrolytic with Hayseed's 200 uf part from the kit, I was still getting very erratic delayed or no starts of the calibrator. I had already noticed that the trimmer capacitor did not change the frequency and the calibrator frequency was definitely off-frequency. I discovered tonight that the oscillator wouldn't start at all anymore - unless I would touch it with a scope probe.
>
> I increased the tension on the trimmer cap rotor (it was obvious that someone had messed with it). Nada. I then metered out the connection from the crystal/FET junction to the trimmer. No connection. Bingo!
>
> There was an invisible break in the etch - I reflowed solder along its length and that did the trick.
>
> Tomorrow, I start the refurb and replace the can capacitor - assuming I'm not in the middle of any real estate happenings ;-)
>
> Steve Wedge, W1ES/4
>

13739. Re: [DrakeRadio] TR7 band switching problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 14:05:14 UTC
From: Garey Barrell
Topic: 13729 Message: 13739

Greg -

Welcome to the madness!! :-)

I think you may be beyond this, but I find the attached handy when troubleshooting in this area.....

Keep us posted!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k2gtm1 wrote:
> Hello all!
>
> I've been dreaming about owning a TR7 for decades, and I finally got an excellent-condition one with all the bells and whistles (PS7, NB7, DR7, AUX7, FA7, SL-300, SL-500, SL-1800). Best part, the price was very reasonable! :)
>
> Unfortunately, it has/had some issues I'm working on:
> - There was no speaker audio. Caused by a bad LM380 audio amp chip.
> - Intermittents. I cleaned all of the Molex pins and re-soldered them to the boards.
> - A strange issue with band selection: I haven't been able to figure this out yet and I'm hoping someone can help...
>
> The radio will not tune above the 23.5 MHz segment. Also, the segments are out-of order when going through them using the DR7 UP/DOWN buttons. Here are the frequencies I get when the PTO dial is set to 0 00 for each band switch position and DR7 step:
>
> BAND SWITCH // # of STEPS // FREQUENCIES
> 1.5 - 2 // 1 // 1.5
> 2 - 3 // 2 // 2, 2.5
> 3 - 4.5 // 3 // 3, *2.5, 3
> 4.5 - 7 // 5 // 3.5, 4, 4.5, 5, 5.5
> 7 - 10 // 6 // 6, 6.5, 7, *6.5, 7, 7.5
> 10 - 15 // 10 // 8, 8.5, 9, 9.5, 10, 10.5, 11, *10.5, 11, 11.5
> 15 - 22 // 14 // 12, 12.5, 13, 13.5, 14, 14.5, 15, *14.5, 15, 15.5, 16, 16.5, 17, 17.5
> 22 - 30 // 16 // 18, 18.5, 19, *18.5, 19, 19.5, 20, 20.5, 21, 21.5, 22, 22.5, 23, *22.5, 23, 23.5
>
> (* denotes where "step-backs" occur, even when pressing UP)
>

> Hopefully this makes sense!
>
> Here's what I've figured out so far:
> - The DR7 UP/DOWN buttons work correctly and the PROM chip correctly prevents the user from going too high or too low within the band selected.
> - The number of 500 kHz steps selectable within each band is correct.
> - U9005(LSD) and U9006(MSD) on DR7 are loading the correct values into the translator board (i.e. "83" for 1.5 MHz and "27" for 29.5 MHz).
> - The radio transmits and receives properly on the displayed frequencies. (The radio is trying to get to the correct 500 kHz segments, but can't.)
>
> SO, I've gone as far as I can considering I don't have any extender boards to test the translator board (and especially the divide-by-n circuit) directly. I'm guessing it must be one of the ICs in that circuit that isn't working correctly. I could just replace all four of the ICs, but I'd rather know exactly what the bad part is.
>
> Does anyone have any idea what would be causing this mess?? Also, would anyone be willing to lend me a working translator board so I can try it in my TR7? Your help will be GREATLY appreciated!
>
> I'm in love with this radio - even if it doesn't work right!! :)
>
> Thanks and 73,
> -Greg K2GTM
>

[Non-text portions of this message have been removed]

13740. Re: Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 15:14:00 UTC
From: Paul
Topic: 13727 Message: 13740

Have to agree with you, Dan. Paul's ESAC-4 kit went in without a hitch and worked fine. Soon I will get to install his ESAC-3 kit (it's almost finished in development) and I'll write a report on that installation here when I've finished .

I am looking forward to seeing some of you at Dayton in a few days!

73,
de Paul, NR3P

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> As the happy owner, and installer, of 3, of Paul's ESAC-4 kits, as well as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R kit, is a good design, but I am far happier, with Paul's ESAC-4 kits. They install easier, and they have a cleaner "Look" to them. You will be very pleased with one, should you acquire it. I recommend his design, highly.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
> As well as, classic old, vacuum tube ham radios.
>
> Sent from my iPad.
>
> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
>
> > Just wanted to let everyone know that due to a conflictual family even in
> > another part of the country I won't be able to be at Dayton but my presence
> > will be.
> > I invite you to stop by the Drake forum and possibly win one of my superb
> > ES4AC-4 rebuild kits for FREE.
> > Even if you don't win the door prize you can still be a winner with one of
> > our in stock kits. Assembled and tested ready for EZ installation only
> > $49.95 (no matter where you buy it).
> > Paul K0UYA
> > Electronic Specialties
> > Specialists in industrial control for over 40 years
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> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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13741. Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 15:43:08 UTC
From: Don Cunningham
Topic: 13727 Message: 13741

Dan,
I agree that Paul's boards are the best I have seen, are built and
tested and wire in easily. I will buy more of them as needed, I like
the way they cover both sides of the chassis.
73,
Don, WB5HAK
On 5/15/2013 12:06 AM, Dan Galligan wrote:
> As the happy owner, and installer, of 3, of Paul's ESAC-4 kits, as well as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R kit, is a good design, but I am far happier, with Paul's ESAC-4 kits. They install easier, and they have a cleaner "Look" to them. You will be very pleased with one, should you acquire it. I recommend his design, highly.
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> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
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>> Yahoo! Groups Links

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> [Non-text portions of this message have been removed]
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13742. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 15:54:20 UTC
From: Charles Ring
Topic: 13727 Message: 13742

Is the ESAC-4 available on the web? Address?

73 de W3NU

On 5/15/2013 1143, Don Cunningham wrote:
>
> Dan,
> I agree that Paul's boards are the best I have seen, are built and
> tested and wire in easily. I will buy more of them as needed, I like
> the way they cover both sides of the chassis.
> 73,
> Don, WB5HAK
> On 5/15/2013 12:06 AM, Dan Galligan wrote:
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> AC-4R kit, is a good design, but I am far happier, with Paul's ESAC-4
> kits. They install easier, and they have a cleaner "Look" to them. You
> will be very pleased with one, should you acquire it. I recommend his
> design, highly.
> >
> > 73,
> > Dan
> > W3RXO/W6
> > Pomona, CA
> > DM14cb
> >
> > In tough economic times, it is purported to be beneficial to invest
> in precious metals, like platinum, gold and silver.
> > Personally, I choose to invest in blued steel, brass, and copper
> jacketed lead.
> > As well as, classic old, vacuum tube ham radios.
> >
> > Sent from my iPad.
> >
> > On May 14, 2013, at 19:13, Paul Kraemer <elespe@...
> <mailto:elespe%40lisco.com>> wrote:
> >
> >> Just wanted to let everyone know that due to a conflictual family
> even in
> >> another part of the country I won't be able to be at Dayton but my
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> >> Paul K0UYA
> >> Electronic Specialties
> >> Specialists in industrial control for over 40 years
>

[Non-text portions of this message have been removed]

13743. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 16:13:21 UTC
From: Dan Galligan
Topic: 13727 Message: 13743

Charles,
I got mine, by emailing directly to Paul.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On May 15, 2013, at 8:54, Charles Ring <w3nu@...> wrote:

> Is the ESAC-4 available on the web? Address?
>
> 73 de W3NU
>
>
>
> On 5/15/2013 1143, Don Cunningham wrote:
>>
>> Dan,
>> I agree that Paul's boards are the best I have seen, are built and
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>>> Pomona, CA
>>> DM14cb
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>>> As well as, classic old, vacuum tube ham radios.
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>>> Sent from my iPad.
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>>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...
>> <mailto:elespe%40lisco.com>> wrote:
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13744. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 16:28:00 UTC
From: Don Cunningham
Topic: 13727 Message: 13744

Dan,

Thanks for that clarification. I didn't notice when I replied to
another list member that he emailed directly. Paul's email is
elespe@... .
73,
Don, WB5HAK
On 5/15/2013 11:13 AM, Dan Galligan wrote:
> Charles,
> I got mine, by emailing directly to Paul.
>
> 73,
> Dan
> W3RXO/W6
> Pomona, CA
> DM14cb
>
> In tough economic times, it is purported to be beneficial to invest in precious metals,
like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
> As well as, classic old, vacuum tube ham radios.
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>
> On May 15, 2013, at 8:54, Charles Ring <w3nu@...> wrote:
>
>> Is the ESAC-4 available on the web? Address?
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>> 73 de W3NU
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>> On 5/15/2013 1143, Don Cunningham wrote:
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>>>> 73,
>>>> Dan
>>>> W3RXO/W6
>>>> Pomona, CA
>>>> DM14cb
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>>>> As well as, classic old, vacuum tube ham radios.
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>>>> Sent from my iPad.
>>>>
>>>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...
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> [Non-text portions of this message have been removed]
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13745. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:05:05 UTC
From: William Houghton
Topic: 13727 Message: 13745

Does anyone have any photos of Paul's boards?

From: Don Cunningham <donc@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 15, 2013 9:28:23 AM
Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards

Dan,

Thanks for that clarification. I didn't notice when I replied to
another list member that he emailed directly. Paul's email is
elespe@... .
73,
Don, WB5HAK
On 5/15/2013 11:13 AM, Dan Galligan wrote:
> Charles,
> I got mine, by emailing directly to Paul.
>
> 73,
> Dan
> W3RXO/W6
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> In tough economic times, it is purported to be beneficial to invest in precious
>metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed
lead.
> As well as, classic old, vacuum tube ham radios.
>
> Sent from my iPad.
>
> On May 15, 2013, at 8:54, Charles Ring <w3nu@roadrunner.com> wrote:
>
>> Is the ESAC-4 available on the web? Address?
>>
>> 73 de W3NU
>>
>>
>>
>> On 5/15/2013 1143, Don Cunningham wrote:
>>> Dan,
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>>>> Dan
>>>> W3RXO/W6
>>>> Pomona, CA
>>>> DM14cb
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>>>> In tough economic times, it is purported to be beneficial to invest
>>> in precious metals, like platinum, gold and silver.
>>>> Personally, I choose to invest in blued steel, brass, and copper
>>> jacketed lead.
>>>> As well as, classic old, vacuum tube ham radios.
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>>>>
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>>>>> our in stock kits. Assembled and tested ready for EZ installation only
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>> [Non-text portions of this message have been removed]
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13746. SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:27:02 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13746

I have an SPR-4 with some problems. I thought they might be idiosyncrasies until I picked up another SPR-4 which does not have these problems.

The first is tuning. The tuning knob takes some force to move in either direction, the one on the "new" radio spins smooth as silk. At some points on the dial it goes "thunk", needs more force and then moves. It does tune as you move it.

I've replaced the rubber tube. With the knob off there is a small silver colored shaft which rotates (and tunes) freely. The dial does not move, and it has a limited amount of rotation.

Turning the outer shaft, which does move the dial, is difficult.

The second problem is that the radio goes "click" or "tick" and becomes almost silent. A previously unheard, low level hum comes out of the speaker. The S-meter continues to read normally.

This goes on for a few seconds to several minutes and then goes back to normal. It happens in all modes.

Changing the settings of any of the switches does nothing.

Sometimes a local FM station can be heard muffled in the background if the audio gain is turned all the way up.

Note that I am in Jerusalem, so recommendations for repair people, or offers to look at it need to be from people in Israel.

Thanks in advance for any help.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13747. Re: [DrakeRadio] Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 16:58:02 UTC
From: Rod Bridgers
Topic: 13727 Message: 13747

How does one obtain these kits?

Thanks

--- On Tue, 5/14/13, Paul Kraemer <elespe@...> wrote:

From: Paul Kraemer <elespe@...>
Subject: [DrakeRadio] Dayton
To: DrakeRadio@yahoogroups.com
Date: Tuesday, May 14, 2013, 7:13 PM

Just wanted to let everyone know that due to a conflictual family even in another part of the country I won't be able to be at Dayton but my presence will be.
I invite you to stop by the Drake forum and possibly win one of my superb ES4AC-4 rebuild kits for FREE.
Even if you don't win the door prize you can still be a winner with one of our in stock kits. Assembled and tested ready for EZ installation only $49.95 (no matter where you buy it).
Paul K0UYA
Electronic Specialties
Specialists in industrial control for over 40 years

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13748. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:37:49 UTC
From: Garey Barrell
Topic: 13727 Message: 13748

Bill -

Here is a photo of the two boards in place. The one on the right side has been reworked slightly to give more room around the late model transformer. The first one fit fine, just was tight.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Does anyone have any photos of Paul's boards?
>
>

[Non-text portions of this message have been removed]

13749. Re: [DrakeRadio] Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:38:56 UTC
From: Garey Barrell
Topic: 13727 Message: 13749

eMail Paul direct

<elespe@...>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Rod Bridgers wrote:
> How does one obtain these kits?
>
> Thanks
>

13750. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:47:41 UTC
From: Garey Barrell
Topic: 13746 Message: 13750

Geoff -

See <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm> for an article on the C-Line PTO. Same as SPR-4, just single dial. Problem is most likely swollen nylon gears from petroleum based lubricant. Nylon(and Brass) gears do NOT need oil or grease....

Your second problem sounds like it may be either a cracked resistor or a cracked PC trace. Troubleshoot the resistor by pushing on each resistor with the eraser end of a pencil. Resistors can overheat and crack, and still look perfect. A little sideways force and they fall in half! It could also be just a cracked solder joint, same technique, just poke around with your stick and see if you can make it happen. From your description, it's almost certain to be in the audio stages, possibly the detectors IF it does it on SSB and AM.

Of course exercising the switches is a good idea, plus treatment with DeoxIT.

PC board trace cracks can be detected by the pencil technique as well, and sometimes with a BRIGHT light behind the board, examining each trace for 'light leaks'! :-)

Let us know!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Geoffrey S. Mendelson wrote:
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> idiosyncrasies until I picked up another SPR-4 which does not have these
> problems.
>
> The first is tuning. The tuning knob takes some force to move in either
> direction, the one on the "new" radio spins smooth as silk. At some
> points on the dial it goes "thunk", needs more force and then moves. It
> does tune as you move it.
>
> I've replaced the rubber tube. With the knob off there is a small silver
> colored shaft which rotates (and tunes) freely. The dial does not move,
> and it has a limited amount of rotation.
>
> Turning the outer shaft, which does move the dial, is difficult.

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> The second problem is that the radio goes "click" or "tick" and becomes
> almost silent. A previously unheard, low level hum comes out of the
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> This goes on for a few seconds to several minutes and then goes back to
> normal. It happens in all modes.
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> Sometimes a local FM station can be heard muffled in the background if
> the audio gain is turned all the way up.
>
> Note that I am in Jerusalem, so recommendations for repair people, or
> offers to look at it need to be from people in Israel.
>
> Thanks in advance for any help.
>
> Geoff.
>

13751. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 17:52:03 UTC
From: Garey Barrell
Topic: 13727 Message: 13751

I too agree that Paul has a very nice, well engineered product. It
fits well, is a simple, straightforward installation, and looks like
it belongs there!

The only down side is thatit's already BUILT!!!!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Don Cunningham wrote:
> Dan,
> I agree that Paul's boards are the best I have seen, are built and
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> the way they cover both sides of the chassis.
> 73,
> Don, WB5HAK
> On 5/15/2013 12:06 AM, Dan Galligan wrote:
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>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
>> DM14cb
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>> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
>> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
>> As well as, classic old, vacuum tube ham radios.
>>
>> Sent from my iPad.
>>
>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
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>>> Just wanted to let everyone know that due to a conflictual family even in
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>>> I invite you to stop by the Drake forum and possibly win one of my superb

>>> ES4AC-4 rebuild kits for FREE.
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>>> Paul K0UYA
>>> Electronic Specialties
>>> Specialists in industrial control for over 40 years
>>>

13752. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 18:08:36 UTC
From: Chgypsy@...
Topic: 13727 Message: 13752

In a message dated 5/15/2013 1:05:09 P.M. Eastern Daylight Time,
rdrbill@... writes:

Does anyone have any photos of Paul's boards?
I believe that he had them on Yahoo under our DrakeRadio name. Maybe 60
days ago. Carl wd8nhk

[Non-text portions of this message have been removed]

13753. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 18:30:04 UTC
From: GALE STEWARD
Topic: 13727 Message: 13753

True, they are already built but at least we get the satisfaction of removing the old components and then hooking up the new boards.

A great product. I have recently installed one and have another on the way.

73, Stew K3ND

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 15, 2013 1:52 PM
Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards

I too agree that Paul has a very nice, well engineered product. It fits well, is a simple, straightforward installation, and looks like it belongs there!

The only down side is thatit's already BUILT!!!!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Don Cunningham wrote:
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>> 73,
>> Dan
>> W3RXO/W6
>> Pomona, CA
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>> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
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>> Sent from my iPad.
>>
>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
>>
>>> Just wanted to let everyone know that due to a conflictual family even in
>>> another part of the country I won't be able to be at Dayton but my presence
>>> will be.
>>> I invite you to stop by the Drake forum and possibly win one of my superb
>>> ES4AC-4 rebuild kits for FREE.
>>> Even if you don't win the door prize you can still be a winner with one of
>>> our in stock kits. Assembled and tested ready for EZ installation only
>>> $49.95 (no matter where you buy it).
>>> Paul K0UYA
>>> Electronic Specialties
>>> Specialists in industrial control for over 40 years
>>>

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13754. ESAC-4R Photos

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 18:42:22 UTC
From: Garey Barrell
Topic: 13754 Message: 13754

I have uploaded a few photos that Paul sent me.

Will at least give you an idea until he has time to do it 'right'!!

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

13755. Re: [DrakeRadio] Vacuum Tube Volt Meter VTVM versus Digital Multi Meter DMM

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-14 04:46:45 UTC
From: Charles Ahlgren
Topic: 13705 Message: 13755

Dan:

I am not an expert, but have had some experience with older test gear; mainly back in the early 1970's when I repaired Heathkit test gear at my local high school...Senior class electronics....

At any rate, a standard Vacuum Tube Volt Meter (VTVM) has an 11 M ohm input...This is mainly so the meter circuit will not pull a lot of current out of the circuit during test...Also, the VTVM provided a nearly constant impedance across all ranges of voltage...So you get good accuracy over a wider range found in the older tube gear...

I think that is basically how it worked... So if you are measuring lower voltages, your meter has similarly smaller impedances that pull down the circuit...

You might want to take a look at this site....
http://tone-lizard.com/VTVM.htm

73's de Charles, KW6G (formerly - WB6IYM)
http://wb6iym.googlepages.com/coffeemugnet

On Mon, May 13, 2013 at 8:30 AM, cavemaaaan <cavemaaan@...> wrote:

> **
>
>
> Hello again all :)
>
> In reading some older posts, I ran across a reply by Garey Barrell where
> he states:
>
> "I just learned the other day, (after 50 years!,) that there are readings
> on that voltage chart that ONLY match IF you use a Vacuum Tube Volt Meter
> (VTVM) to make them. Serious differences, like from e.g., 1.4 VDC to 7.6
> VDC."
>
> By the time I got my electronics wings in the early nineties, the DMM or
> DVM was already king. I worked on some old tube guitar amps year ago whose
> schematics and service manuals talked of the "mysterious" VTVM but I was
> always able to repair without the need for one.
>
> So, Garey got my wondering and I'm asking the Drake Sages here for the
> benefit of all for their thoughts on the differences between a VTVM and a
> modern quality DMM.

>
> For what it's worth, I've used my Fluke 79 at work and at home for 20
> years.
>
> Cheers all,
> Dan
> KD8SSS
>
>
>

[Non-text portions of this message have been removed]

13756. Garey, My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-11 05:13:26 UTC
From: Howard Traxler
Topic: 13756 Message: 13756

To the group: Is there a procedure to get a message posted on the mailing list?

Garey, hi.

I was in luck yesterday. A friend came home with me after a hamfest. He quickly found the two 6EA8s to swap and did it. There was no change in simptoms. Problem is, I forgot to have him swap them back.

To find out more, could I, maybe, inject some kind of signal starting at the receive audio stage and moving back until I lost the signal? Or is there an easier way.

Thanks.
Howard, WA9RYF
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: "Howard Traxler" <howard@traxlerenterprises.com>
Sent: Sunday, April 28, 2013 9:49 PM
Subject: Re: TR-4 Tubes

> Howard -
>
> The V4, 6EJ7, and V6 tube, 12BY7 are in the T-4XC. V3, 6EA8, is only
> inthe TR-4, BUT there are two of them. The other is in V1, and
> swapping these two tubes will at least tell if the symptoms change
> when swapped. If no improvement or no difference, the be sure to swap
> them back.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Howard Traxler wrote:
>> Garey,
>> You suggest I swap out the 12BY7 (V6). Can that tube be found in my A or C lines? If either of my other Drake stations (A or C lines) have that tube, I can borrow it from there. Otherwise I'll have to buy one somewhere.
>>
>> Thanks.
>> Howard, WA9RYF
>> ----- Original Message -----
>> From: "Garey Barrell" <k4oah@mindspring.com>
>> To: "Howard Traxler" <howard@...>
>> Sent: Sunday, April 28, 2013 9:13 AM

>> Subject: Re: Sorry to keep bothering
>>
>>
>>> Howard -
>>>
>>> Youmay be fighting a losing battle. Have you substituted the 12BY7
>>> (V6) ? V3 is one of a few tubes that will kill both receiveand
>>> transmit. Don't forget that little slide switch on the left side, it
>>> will kill the receiver unless pulled forward.
>>>
>>> If neither of thosetubes get us anywhere, we're going to need to
>>> measure the voltages on V3, V4 and V6and compare to the Voltage Chart
>>> in the manual.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> Howard Traxler wrote:
>>>> Hi Garey. I sent this to the list but it was never posted; Obviously you didn't reply. So I'm sending it direct to you. Sorry if it's a problem. Say the word and I'll stop.
>>>>
>>>> Hello again Garey. I do appreciate your help and sure hate to keep bothering you with this thing, but,
>>>>
>>>> Finally got the XYL down there to watch the meter while I fired up the TR-4 as you suggested. I think she's getting a bit tired of my TR-4. Wish I could find an effective way to check it myself.
>>>>
>>>> In any case, setting it up as you say (below), listening on a nearby receiver, there is a signal increase when I move the RF Tune and Plate Tune and not so much when I increase the drive gain. Plate current does not rise from the 100 ma biased point.
>>>>
>>>> Does that give you any ideas what to check next? Will the xmtr not working cause the rcvr to not work? That was the first thing I noticed; the receiver went dead
>>>>
>>>> Thanks, Garey.
>>>>
>>>> 73,
>>>> Howard, WA9RYF
>>>> ----- Original Message -----
>>>> From: "Garey Barrell" <k4oah@...>
>>>> To: <DrakeRadio@yahoogroups.com>
>>>> Sent: Tuesday, April 09, 2013 1:17 PM
>>>> Subject: Re: [DrakeRadio] My non-working TR-4
>>>>
>>>>

>>>>> Howard -
>>>>>
>>>>> I have several of these 'projects' going. Need to refresh a couple of
>>>>> things.
>>>>>
>>>>> Are you able to set the PA idle current to 0.1A?
>>>>>
>>>>> Under test conditions:
>>>>>
>>>>> 7.000 MHz
>>>>> Mode SSB
>>>>> LSB
>>>>> RF TUNE around 12 o'clock +/- 2 (adjust for peak)
>>>>> GAIN 0
>>>>> PTT closed
>>>>> KEY either unplugged or closed
>>>>> PLATE and LOAD adjust for peak.
>>>>>
>>>>> Plate current should show 0.1A (idle current)
>>>>>
>>>>> Increase GAIN while 'watching' PLATE current. Signal strength should
>>>>> increase with GAIN, and PLATE current should be 'dipped' with PLATE
>>>>> control.
>>>>>
>>>>> IF PLATE current does NOT increase whenGAIN is increased we have a
>>>>> problem. If PLATE current increases but output does NOT, then check
>>>>> your power meter!
>>>>>
>>>>> The slide switch on the rear panel only dims the panel lamps for
>>>>> night-time / mobile use.
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> Howard Traxler wrote:
>>>>>> Garey,
>>>>>>
>>>>>> Further results from testing:
>>>>>> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0,
PTT closed, keyjack closed, into a dummy load
>>>>>>
>>>>>> R-4C across the room with no antenna receives a solid carrier. weaker carrier when
xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune
and load effects the carrier strength. I get the normal 60Hz hum when touching the mic
connection. Not enough output to register on my relative power out squawker (I use for
tuning).

>>>>>>
>>>>>> TR-4 still doesn't receive when connected to antenna.
>>>>>>
>>>>>> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>>>>>>
>>>>>> Thanks, Garey
>>>>>>
>>>>>> 73
>>>>>> Howard, WA9RYF
>>>>>>
>>>>>>
>>>>>>
>>>>>> ----- Original Message -----
>>>>>> From: "Howard Traxler" <howard@traxlerenterprises.com>
>>>>>> To: <DrakeRadio@yahoogroups.com>
>>>>>> Sent: Wednesday, April 24, 2013 12:12 AM
>>>>>> Subject: Re: [DrakeRadio] My non-working TR-4
>>>>>>
>>>>>>
>>>>> Hello again Garey,
>>>>>
>>>>> Finally got the XYL down there to watch the meter while I fired up the TR-4 as you suggested. I think she's getting a bit tired of my TR-4. Wish I could find an effective way to check it myself.
>>>>>
>>>>> In any case, setting it up as you say (below), listening on a nearby receiver, there is a signal increase when I move the RF Tune and Plate Tune and not so much when I increase the drive gain. Plate current does not rise from the 100 ma biased point.
>>>>>
>>>>> Does that give you any ideas what to check next? Will the xmtr not working cause the rcvr to not work? That's the first thing I noticed; the receiver went dead
>>>>>
>>>>> Thanks, Garey.
>>>>>
>>>>> 73,
>>>>> Howard, WA9RYF
>>>>> ----- Original Message -----
>>>>> From: "Garey Barrell" <k4oah@mindspring.com>
>>>>> To: <DrakeRadio@yahoogroups.com>
>>>>> Sent: Tuesday, April 09, 2013 1:17 PM
>>>>> Subject: Re: [DrakeRadio] My non-working TR-4
>>>>>
>>>>>
>>>>>> Howard -
>>>>>>
>>>>>> I have several of these 'projects' going. Need to refresh a couple of
>>>>>> things.
>>>>>>
>>>>>> Are you able to set the PA idle current to 0.1A?

>>>>>>
>>>>>> Under test conditions:
>>>>>>
>>>>>> 7.000 MHz
>>>>>> Mode SSB
>>>>>> LSB
>>>>>> RF TUNE around 12 o'clock +/- 2 (adjust for peak)
>>>>>> GAIN 0
>>>>>> PTT closed
>>>>>> KEY either unplugged or closed
>>>>>> PLATE and LOAD adjust for peak.
>>>>>>
>>>>>> Plate current should show 0.1A (idle current)
>>>>>>
>>>>>> Increase GAIN while 'watching' PLATE current. Signal strength should
>>>>>> increase with GAIN, and PLATE current should be 'dipped' with PLATE
>>>>>> control.
>>>>>>
>>>>>> IF PLATE current does NOT increase whenGAIN is increased we have a
>>>>>> problem. If PLATE current increases but output does NOT, then check
>>>>>> your power meter!
>>>>>>
>>>>>> The slide switch on the rear panel only dims the panel lamps for
>>>>>> night-time / mobile use.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
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>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> Howard Traxler wrote:
>>>>>>> Garey,
>>>>>>>
>>>>>>> Further results from testing:
>>>>>>> 3975 KHz, Mode CW, USB/LSB set either way, Preselecter near 2:00 position, Drive 0, PTT closed, keyjack closed, into a dummy load
>>>>>>>
>>>>>>> R-4C across the room with no antenna receives a solid carrier. weaker carrier when xmtr switched to CAL or SSB. Increasing the drive makes the carrier stronger. Plate tune and load effects the carrier strength. I get the normal 60Hz hum when touching the mic connection. Not enough output to register on my relative power out squawker (I use for tuning).
>>>>>>>
>>>>>>> TR-4 still doesn't receive when connected to antenna.
>>>>>>>
>>>>>>> There is a slide switch on the rear of the TR-4. Would that have anything to do with my problems.
>>>>>>>

>>>>>>> Thanks, Garey
>>>>>>>
>>>>>>> 73
>>>>>>> Howard, WA9RYF
>>>>>>>
>>>> ----- Original Message -----
>>>> From: "Garey Barrell" <k4oah@...>
>>>> To: "Howard Traxler" <howard@...>
>>>> Sent: Sunday, April 07, 2013 8:52 AM
>>>> Subject: Re: Your help
>>>>
>>>>
>>>>> Howard -
>>>>>
>>>>> I did not realize you were unable to see what we are talking about! I
>>>>> may have known that at some time, but forgive me for forgetting. I
>>>>> tried to OCR the original manual for the 2-B so the Adobe would be
>>>>> able to read it, but the paragraph arrangement really doesn't OCR well!
>>>>>
>>>>> MY file would not be of much use, since it consists mainly of
>>>>> photographs of the chassis, with the parts identified. I may have to
>>>>> try that again and see if I can find a way to arrange the information
>>>>> in the R-4A manual to be "readable".
>>>>>
>>>>> The description I gave you yesterday should enableyou to find V4 and
>>>>> V6. Let me see if I can do better now.
>>>>>
>>>>> With the radio upright, and the front panel to you, there are four
>>>>> tubes to the left of the TUNE and LOAD shafts that run from the panel
>>>>> to the PA cage. These are the ones you had to pull to get the cage
>>>>> off. The four tubes are in a rectangle, with V4 on the left, closest
>>>>> to the front panel, and V6 is on the right, closest to the PA cage.
>>>>> So lower left and top right corners of the quad.
>>>>>
>>>>> Let me know!
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> Howard Traxler wrote:
>>>>>> Garey,
>>>>>> I am greatful for the help you're giving me with the TR-4. I do
>>>>>> appreciate your suggestion that I obtain the CD, but:
>>>>>> I did, some time ago, purchase your B line CD--I don't know why the
>>>>>> B line because I have a C line, an A line and this TR-4. As I'm
>>>>>> sure you're aware, I am blind and using synthetic speech and Braille

>>>>>> to access my computer. The accessability features built-in to the
>>>>>> Adobe reader does very little with .pdf files that are exclusively
>>>>>> graphical. The CD I bought has manuals for the T-4X and R-4A.
>>>>>> Opening the T-4X manual gives me only a series of numbers and the
>>>>>> R-4A says "empty document". My next trick might be to print the
>>>>>> files, then OCR them. This would probably show any text in the
>>>>>> files. However, since they are designed to be graphical in nature,
>>>>>> I doubt that there is much text in them.
>>>>>> Believe me, if I could make use of the CDs, I would purchase them.
>>>>>> Once again, I DO appreciate the help you are offering on the mailing
>>>>>> list.
>>>>>> 73
>>>>>> Howard, WA9RYF
>

13757. Why not a kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:02:20 UTC
From: Paul Kraemer
Topic: 13757 Message: 13757

Why not a kit?
Good question which comes up time to time
I don't really have a great answer. I polled some folks on the "other" reflector once about a power supply kit because I thought the world was yearning for our old Heathkits but indications were running built was better if it was affordable, but just their opinion.
I could look at it and offer either way for a discount. Work wise it is inserting 20 components, soldering and trimming 40 leads. Shipping would be easier and much cheaper.
Here, everything on a circuit board is machine soldered and the ladies are very adept at inserting components so manufaturing time is minimal. Testing and packing takes longer!
I am flexible and gladly go either way or both
I did offer it to one overseas inquiry as a means of minimizing postage
So, if you want a kit, I'll look at how much less that can be
Paul K0UYA

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 15, 2013 12:52 PM
Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards

>I too agree that Paul has a very nice, well engineered product. It
> fits well, is a simple, straightforward installation, and looks like
> it belongs there!
>
> The only down side is thatit's already BUILT!!!!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Don Cunningham wrote:
>> Dan,
>> I agree that Paul's boards are the best I have seen, are built and
>> tested and wire in easily. I will buy more of them as needed, I like
>> the way they cover both sides of the chassis.
>> 73,
>> Don, WB5HAK
>> On 5/15/2013 12:06 AM, Dan Galligan wrote:
>>> As the happy owner, and installer, of 3, of Paul's ESAC-4 kits, as well

>>> as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R
>>> kit, is a good design, but I am far happier, with Paul's ESAC-4 kits.
>>> They install easier, and they have a cleaner "Look" to them. You will be
>>> very pleased with one, should you acquire it. I recommend his design,
>>> highly.
>>>
>>> 73,
>>> Dan
>>> W3RXO/W6
>>> Pomona, CA
>>> DM14cb
>>>
>>> In tough economic times, it is purported to be beneficial to invest in
>>> precious metals, like platinum, gold and silver.
>>> Personally, I choose to invest in blued steel, brass, and copper
>>> jacketed lead.
>>> As well as, classic old, vacuum tube ham radios.
>>>
>>> Sent from my iPad.
>>>
>>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
>>>
>>>> Just wanted to let everyone know that due to a conflictual family even
>>>> in
>>>> another part of the country I won't be able to be at Dayton but my
>>>> presence
>>>> will be.
>>>> I invite you to stop by the Drake forum and possibly win one of my
>>>> superb
>>>> ES4AC-4 rebuild kits for FREE.
>>>> Even if you don't win the door prize you can still be a winner with one
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>>>> Paul K0UYA
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>>>>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
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13758. Re: [DrakeRadio] Paul's ESAC-4 Boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:02:40 UTC
From: Al Parker
Topic: 13727 Message: 13758

Hi al,
I've reached the point that for this application I'm happy that it's already built ;-) Lotsa projects in the queue, and I work slower than I once did.
I bought one of Paul's kits about a month ago, finally got a round tuit & put it in a week or so ago, now. It went in very nicely. I put it in a late AC-4, and he had noted that the fit wouldn't be "perfect" for one of the boards, and he'd send an updated board. I opted to keep what I had, it's not that far off.
5 or 6 yrs ago, maybe, I'd used one of Mike Bryce's AC4-R kits, (don't have that supply now) and still have one more, which I had planned to use now, right after Paul's, so I could write up a comparison. I haven't gotten tuit for this one yet, it'll probably have to wait another cupla wks b4 I can do it.
I like them both. But as Dan said, Paul's may make things look cleaner. I'll be able to compare better, later.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much
worth doing as simply messing about in boats"
Ratty, to Mole

On 5/15/2013 2:30 PM, GALE STEWARD wrote:
> True, they are already built but at least we get the satisfaction of
> removing the old components and then hooking up the new boards.
>
> A great product. I have recently installed one and have another on the way.
>
> 73, Stew K3ND
>
> _____
> From: Garey Barrell <k4oah@... <mailto:k4oah%40mindspring.com>>
>
> I too agree that Paul has a very nice, well engineered product. It
> fits well, is a simple, straightforward installation, and looks like
> it belongs there!
>
> The only down side is thatit's already BUILT!!!!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA

> Don Cunningham wrote:
> > Dan,
> > I agree that Paul's boards are the best I have seen, are built and
> > tested and wire in easily. I will buy more of them as needed, I like
> > the way they cover both sides of the chassis.
> > 73,
> > Don, WB5HAK
> > On 5/15/2013 12:06 AM, Dan Galligan wrote:
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> well as 2, AC-4R kits, I am pleased as punch, with Paul's design. The
> AC-4R kit, is a good design, but I am far happier, with Paul's ESAC-4
> kits. They install easier, and they have a cleaner "Look" to them. You
> will be very pleased with one, should you acquire it. I recommend his
> design, highly.
> >>
> >> 73,
> >> Dan
> >> W3RXO/W

<snip>

13759. Re: [DrakeRadio] Garey, My non-working TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:04:53 UTC
From: Garey Barrell
Topic: 13756 Message: 13759

Howard -

I can't figure out why your messages keep ending upin the SPAM filter for the list. You might want to copy me when you send something so that I get it and know to look there. I don't think to look because there's almost NEVER any messages there.....

I'm running out of ideas to try, within our limitations. The fact that you are able to hear the transmitter on a separate receiverindicates that all of the important circuits are at least working, although perhaps not up to full speed. This also indicates that the receiver should be working, at least a little. The slide switch on the left side MUST be in the 'forward' position.

When in Receive, withthe Calibrator on, does the S-Meter move as you tune across a calibration point? The presence (or absence) of S-Meter Indication kind of divides the receiver in half, giving us at least an idea where to start.

Do you hear any hiss or other sound at all out of the speaker in receive?

I think we're going to have to make some DC voltage readings of the various stages. Exercise the switch several times and then leave in the foward position.

Verify that all tubes are heating. Some get QUITE hot, so be careful.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Howard Traxler wrote:
> To the group: Is there a procedure to get a message posted on the mailing list?
>
> Garey, hi.
>
> I was in luck yesterday. A friend came home with me after a hamfest. He quickly found the two 6EA8s to swap and did it. There was no change in simptoms. Problem is, I forgot to have him swap them back.
>
> To find out more, could I, maybe, inject some kind of signal starting at the receive audio stage and moving back until I lost the signal? Or is there an easier way.
>
> Thanks.

> Howard, WA9RYF
>

13760. Re: [DrakeRadio] Why not a kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:08:36 UTC
From: Garey Barrell
Topic: 13757 Message: 13760

Paul -

Perhaps it could be about 40% off for kit form, like Heath used to
do!?!? :-)

Take a look at the photos section and see if you want to add or
subtract anything. I just picked a small sample because some were
asking and I didn't know if you were already 'out of range'.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Kraemer wrote:
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> Good question which comes up time to time
> I don't really have a great answer. I polled some folks on the "other"
> reflector once about a power supply kit because I thought the world was
> yearning for our old Heathkits but indications were running built was
> better if it was affordable, but just their opinion.
> I could look at it and offer either way for a discount. Work wise it is
> inserting 20 components, soldering and trimming 40 leads. Shipping would be
> easier and much cheaper.
> Here, everything on a circuit board is machine soldered and the ladies are
> very adept at inserting components so manufaturing time is minimal. Testing
> and packing takes longer!
> I am flexible and gladly go either way or both
> I did offer it to one overseas inquiry as a means of minimizing postage
> So, if you want a kit, I'll look at how much less that can be
> Paul K0UYA
>
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, May 15, 2013 12:52 PM
> Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards
>
>
>> I too agree that Paul has a very nice, well engineered product. It
>> fits well, is a simple, straightforward installation, and looks like
>> it belongs there!
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>> The only down side is thatit's already BUILT!!!!! :-)
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>> 73, Garey - K4OAH
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>> as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R
>>>> kit, is a good design, but I am far happier, with Paul's ESAC-4 kits.
>>>> They install easier, and they have a cleaner "Look" to them. You will be
>>>> very pleased with one, should you acquire it. I recommend his design,
>>>> highly.
>>>>
>>>> 73,
>>>> Dan
>>>> W3RXO/W6
>>>> Pomona, CA
>>>> DM14cb
>>>>
>>>> In tough economic times, it is purported to be beneficial to invest in
>>>> precious metals, like platinum, gold and silver.
>>>> Personally, I choose to invest in blued steel, brass, and copper
>>>> jacketed lead.
>>>> As well as, classic old, vacuum tube ham radios.
>>>>
>>>> Sent from my iPad.
>>>>
>>>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:
>>>>
>>>>> Just wanted to let everyone know that due to a conflictual family even
>>>>> in
>>>>> another part of the country I won't be able to be at Dayton but my
>>>>> presence
>>>>> will be.
>>>>> I invite you to stop by the Drake forum and possibly win one of my
>>>>> superb
>>>>> ES4AC-4 rebuild kits for FREE.
>>>>> Even if you don't win the door prize you can still be a winner with one
>>>>> of

>>>>> our in stock kits. Assembled and tested ready for EZ installation only
>>>>> $49.95 (no matter where you buy it).
>>>>> Paul K0UYA
>>>>> Electronic Specialties
>>>>> Specialists in industrial control for over 40 years
>>>>>

13761. Re: [DrakeRadio] Why not a kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:28:56 UTC
From: Don Cunningham
Topic: 13757 Message: 13761

Paul,

Please consider keeping the "built kit" as at least a choice. Some of
us old guys don't solder as well as we once did, due to losing eyesight
and motor skills. Also, a LARGE number of us are procrastinators (few
will admit it like I will, hi) and the more work, the longer it gets put
off!!!! I consider your built price a REAL bargain, and I might charge
the kit builders for the priviledge (ducking and running) :>)
73,
Don, WB5HAK
On 5/15/2013 2:02 PM, Paul Kraemer wrote:
> Why not a kit?
> Good question which comes up time to time
> I don't really have a great answer. I polled some folks on the "other"
> reflector once about a power supply kit because I thought the world was
> yearning for our old Heathkits but indications were running built was
> better if it was affordable, but just their opinion.
> I could look at it and offer either way for a discount. Work wise it is
> inserting 20 components, soldering and trimming 40 leads. Shipping would be
> easier and much cheaper.
> Here, everything on a circuit board is machine soldered and the ladies are
> very adept at inserting components so manufaturing time is minimal. Testing
> and packing takes longer!
> I am flexible and gladly go either way or both
> I did offer it to one overseas inquiry as a means of minimizing postage
> So, if you want a kit, I'll look at how much less that can be
> Paul K0UYA
>
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, May 15, 2013 12:52 PM
> Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards
>
>
>> I too agree that Paul has a very nice, well engineered product. It
>> fits well, is a simple, straightforward installation, and looks like
>> it belongs there!
>>
>> The only down side is thatit's already BUILT!!!!! :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>

>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Don Cunningham wrote:
>>> Dan,
>>> I agree that Paul's boards are the best I have seen, are built and
>>> tested and wire in easily. I will buy more of them as needed, I like
>>> the way they cover both sides of the chassis.
>>> 73,
>>> Don, WB5HAK
>>> On 5/15/2013 12:06 AM, Dan Galligan wrote:
>>>> As the happy owner, and installer, of 3, of Paul's ESAC-4 kits, as well
>>>> as 2, AC-4R kits, I am pleased as punch, with Paul's design. The AC-4R
>>>> kit, is a good design, but I am far happier, with Paul's ESAC-4 kits.
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>>>> very pleased with one, should you acquire it. I recommend his design,
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>>>> 73,
>>>> Dan
>>>> W3RXO/W6
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>>>> In tough economic times, it is purported to be beneficial to invest in
>>>> precious metals, like platinum, gold and silver.
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>>>> jacketed lead.
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>>>>>
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>> Yahoo! Groups Links
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13762. my links

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:33:07 UTC
From: Paul Kraemer
Topic: 13762 Message: 13762

I wanted to post these to all who asked today

The current version of the AC-4 rebuild kit ES4AC-4PS. Notice the transformer and moving can capacitor holes resolved. This fits EVERY AC-4 I have found to try and I am having so much fun converting them it is a challenge to keep from offering to pay the shipping both ways so I can convert one more supply! That easy.
http://s358.photobucket.com/user/ee_design/library/AC4REBUILD

Then there is a special kit for the AC-3. Could have used the same boards as for the AC-4 but this is nice, covers the holes, has the bias pot that was covered up by new boards, and, not shown, is the supplied perforated metal cover for the board for safety reasons. This one I seriously would make the offer send me your AC-3 and I'll do it for you just so I can get pictures of an un-modified AC-3. Mine was worked on decades ago and the cable is not original, neither is the added connector for antenna relay. It would be nice to have pictures of an original to upgrade
http://s358.photobucket.com/user/ee_design/library/AC3

Just for fun I included some pictures of a MN-2000 I rebuilt a while back. I replaced the arced and melted selector switch with ones available from Soviet source on ebay for the ridiculous sum of about $3. The cabinet is a repaint too and has side by side comparison with a stock MS-4 (FWIW)
The shack picture---shack of the day---that particular day. Rigs here may come and go but the Drakes stay here forever.
Enjoy!
http://s358.photobucket.com/user/ee_design/media/MN-2000/paint002.jpg.html

Paul K0UYA

13763. Re: [DrakeRadio] my links

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:36:18 UTC
From: Don Cunningham
Topic: 13762 Message: 13763

Paul,

I have a "brand new" looking AC3 that I would pay the postage on both ways and give you the pleasure of fixing. No joking, I've NEVER had or seen one this pristine.
Let me know when you aren't busy (fat chance) and I'll send it.
73,
Don, WB5HAK
On 5/15/2013 2:33 PM, Paul Kraemer wrote:
> I wanted to post these to all who asked today
>
> The current version of the AC-4 rebuild kit ES4AC-4PS. Notice the
> transformer and moving can capacitor holes resolved. This fits EVERY AC-4 I
> have found to try and I am having so much fun converting them it is a
> challenge to keep from offering to pay the shipping both ways so I can
> convert one more supply! That easy.
> http://s358.photobucket.com/user/ee_design/library/AC4REBUILD
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> Then there is a special kit for the AC-3. Could have used the same boards
> as for the AC-4 but this is nice, covers the holes, has the bias pot that
> was covered up by new boards, and, not shown, is the supplied perforated
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> cable is not original, neither is the added connector for antenna relay. It
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> repaint too and has side by side comparison with a stock MS-4 (FWIW)
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> come and go but the Drakes stay here forever.
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>
> Paul K0UYA
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13764. Re: [DrakeRadio] Why not a kit

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 19:59:43 UTC
From: Chris Farley
Topic: 13757 Message: 13764

Hi Paul,

I for one would be more inclined to purchase kits, or even bare boards than a finished product if the price difference is more than a few dollars. Not only 'cause I'm cheap, but because I could select the brand and spec electrolytic caps I personally prefer! If it's cost effective to offer them both (or 3) ways, It would at least be worth a shot to see how they market!

Regards,
Chris kc9ieq

--- On Wed, 5/15/13, Paul Kraemer <elespe@...> wrote:

From: Paul Kraemer <elespe@...>
Subject: [DrakeRadio] Why not a kit
To: DrakeRadio@yahoogroups.com
Date: Wednesday, May 15, 2013, 2:02 PM

Why not a kit?

Good question which comes up time to time

I don't really have a great answer. I polled some folks on the "other"

reflector once about a power supply kit because I thought the world was

yearning for our old Heathkits but indications were running built was

better if it was affordable, but just their opinion.

I could look at it and offer either way for a discount. Work wise it is

inserting 20 components, soldering and trimming 40 leads. Shipping would be

easier and much cheaper.

Here, everything on a circuit board is machine soldered and the ladies are

very adept at inserting components so manufaturing time is minimal. Testing

and packing takes longer!

I am flexible and gladly go either way or both

I did offer it to one overseas inquiry as a means of minimizing postage

So, if you want a kit, I'll look at how much less that can be

Paul K0UYA

----- Original Message -----

From: "Garey Barrell" <k4oah@mindspring.com>

To: <DrakeRadio@yahoogroups.com>

Sent: Wednesday, May 15, 2013 12:52 PM

Subject: Re: [DrakeRadio] Paul's ESAC-4 Boards

>I too agree that Paul has a very nice, well engineered product. It

> fits well, is a simple, straightforward installation, and looks like

> it belongs there!

>

> The only down side is thatit's already BUILT!!!!! :-)

>

> 73, Garey - K4OAH

> Glen Allen, VA

>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

> and TR-4/C Service Supplement CDs

> <www.k4oah.com>

>

> Don Cunningham wrote:

>> Dan,

>> I agree that Paul's boards are the best I have seen, are built and

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>> 73,

>> Don, WB5HAK

>> On 5/15/2013 12:06 AM, Dan Galligan wrote:

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>>> 73,

>>> Dan

>>> W3RXO/W6

>>> Pomona, CA

>>> DM14cb

>>>

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>>> precious metals, like platinum, gold and silver.

>>> Personally, I choose to invest in blued steel, brass, and copper

>>> jacketed lead.

>>> As well as, classic old, vacuum tube ham radios.

>>>

>>> Sent from my iPad.

>>>

>>> On May 14, 2013, at 19:13, Paul Kraemer <elespe@...> wrote:

>>>

>>>> Just wanted to let everyone know that due to a conflictual family even

>>>> in

>>>> another part of the country I won't be able to be at Dayton but my

>>>> presence

>>>> will be.

>>>> I invite you to stop by the Drake forum and possibly win one of my

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>>>>

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> Yahoo! Groups Links

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[Non-text portions of this message have been removed]

13765. AC-3 offer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 22:44:12 UTC
From: Paul Kraemer
Topic: 13765 Message: 13765

Thank-you to those who responded to my offer to re build their AC-3 so I could use photos of the project
That went FAST
Paul K0UYA

13766. Re: [DrakeRadio] AC-3 offer

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 22:58:41 UTC
From: Don Cunningham
Topic: 13765 Message: 13766

Okay, I'll bite. Who won the "competition"??
Don

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6326 - Release Date: 05/15/13

13767. Re: Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-15 23:41:03 UTC
From: matt.newman10
Topic: 13727 Message: 13767

Paul,

I just want to add my comment to the chorus to say how pleased I am with my ES4AC-4PS. The ES4AC-4PS is the second AC-4 upgrade kit I've installed and the first from Electronic Specialties. Mechanical integrity is without a doubt the best with straight forward installation. Great service. Great product.

73, Matt - VA3MGN

--- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@...> wrote:
>
> Just wanted to let everyone know that due to a conflictual family even in
> another part of the country I won't be able to be at Dayton but my presence
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> I invite you to stop by the Drake forum and possibly win one of my superb
> ES4AC-4 rebuild kits for FREE.
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>

13768. Re: [DrakeRadio] R-4B Calibrator Mystery Solved!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 00:34:40 UTC
From: Steve Wedge
Topic: 13731 Message: 13768

Yeah, it is satisfying - which is why I do it.

I stripped it this morning because I figured I'd have a few hours - and the phone started ringing for showings. The joy of spring in real estate I might even have an offer coming; told one of my colleagues this happens whenever I decide to go fishing or tear into a radio. Told him I'll have to get more radios.

Once the calibrator and all bands were working, the receiver got stripped and bathed today and I've got it about half put back together. The chassis looks somewhat better than I anticipated. Still have to clean the knobs and some other parts. I'm debating replacing all the tubes with NOS but think I'll only do that if it replaces my current station R-4B. Have to look at the chassis side-by-each first. Figure it'll get the smoke test tomorrow, then I change the can cap.

This one belonged to a CW op, as the 10m xtal on top is 39.1. That's how I usually configure mine.

The B's are becoming second-nature to me - to the point where I have to be careful when working on A's or C's - especially A's, as I found out a few weeks ago when I swapped the 6EH5 and the 0B2. I was lucky on that one with only a smoked resistor.

I'm going to have more fun with this R-4C I recently got, but that will be a new post...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 15, 2013 9:55 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4B Calibrator Mystery Solved!

Steve -

Good job!! The simplest ones can sometimes be the toughest..... I
have a small high intensity Maglite that I used behind PC boards to
look for breaks. I have to admit though that it would have taken me a
while to get to that point!! :-)

But it IS satisfying when you finally find all the little 'presents'
left by your predecessor(s)!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> This simple circuit was kicking my butt, so I had to assume that more than one thing was wrong with it - especially since (a) it didn't work when I got the receiver, after (b) the previous owner had obviously removed it and worked on it. During that process, the PO created other problems, such as shorting the replacement crystal case to the feedthrough where the jumper connects 25 kHz to the 0.001 uf cap plus a couple of other sloppy solder joints.
>
> After replacing the electrolytic with Hayseed's 200 uf part from the kit, I was still getting very erratic delayed or no starts of the calibrator. I had already noticed that the trimmer capacitor did not change the frequency and the calibrator frequency was definitely off-frequency. I discovered tonight that the oscillator wouldn't start at all anymore - unless I would touch it with a scope probe.
>
> I increased the tension on the trimmer cap rotor (it was obvious that someone had messed with it). Nada. I then metered out the connection from the crystal/FET junction to the trimmer. No connection. Bingo!
>
> There was an invisible break in the etch - I reflowed solder along its length and that did the trick.
>
> Tomorrow, I start the refurb and replace the can capacitor - assuming I'm not in the middle of any real estate happenings ;-)
>
> Steve Wedge, W1ES/4
>

[Non-text portions of this message have been removed]

13769. No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 00:37:05 UTC
From: Steve Wedge
Topic: 13769 Message: 13769

Does anyone on here know the reason why Drake used knobs without setscrews only on the AF and RF GAIN controls? Was is cost-savings? That's the only logical reason I can see. Putting those on the switches would have had them falling off all the time from the vibration.

They're kind of a pain, since I've seen many front panels damaged by those knobs when they're pushed on too far.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13770. Re: [DrakeRadio] No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 01:07:18 UTC
From: Garey Barrell
Topic: 13769 Message: 13770

Steve -

That onehas always puzzled me too. I guess they're slightly cheaper,
drill and tap the set screw vs slip in a small, easily lost spring clip.

But couldn't have been more than a few pennies, in production
quantities, ona $400 receiver. Certainly wouldn't have been a time
saver in production. Plus having to inventory and keep straight two
types of identical appearing knobs. Maybe someone got a great buy on
some? They wouldn'thold up with rotary switches. I suppose
it'spossible that the controls used came only with the flatted shaft,
but even that still works fine with the set screw. I always replaced
them with a SS type as soon as I got a new receiver.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Steve Wedge wrote:
> Does anyone on here know the reason why Drake used knobs without setscrews only on the AF and RF GAIN controls? Was is cost-savings? That's the only logical reason I can see. Putting those on the switches would have had them falling off all the time from the vibration.
>
> They're kind of a pain, since I've seen many front panels damaged by those knobs when they're pushed on too far.
>
> Steve Wedge, W1ES/4
>

13771. Re: Dayton

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 01:58:03 UTC
From: w4rl@bellsouth.net
Topic: 13727 Message: 13771

Along with the fact that Paul is most certainly a true gentleman's gentleman.

73 Robert W4RL
A Gentleman's word is his bond. Never leave your mind, body, or senses without it.

--- In DrakeRadio@yahoogroups.com, "matt.newman10" <va3mgn@...> wrote:
>
> Paul,
>
> I just want to add my comment to the chorus to say how pleased I am with my ES4AC-4PS. The ES4AC-4PS is the second AC-4 upgrade kit I've installed and the first from Electronic Specialties. Mechanical integrity is without a doubt the best with straight forward installation. Great service. Great product.
>
> 73, Matt - VA3MGN
>
>
> --- In DrakeRadio@yahoogroups.com, "Paul Kraemer" <elespe@> wrote:
> >
> > Just wanted to let everyone know that due to a conflictual family even in
> > another part of the country I won't be able to be at Dayton but my presence
> > will be.
> > I invite you to stop by the Drake forum and possibly win one of my superb
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> >
>

13772. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 01:58:16 UTC
From: Steve Wedge
Topic: 13746 Message: 13772

I had a cold solder joint on an SPR-4 cause a similar problem.

Garey's spot-on about the Nylon gears, unfortunately. You can try the fix on 'HFN's site.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 15, 2013 1:47 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] SPR-4 problems

Geoff -

See <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm> for
an article on the C-Line PTO. Same as SPR-4, just single dial.
Problem is most likely swollen nylon gears from petroleum based
lubricant. Nylon(and Brass) gears do NOT need oil or grease....

Your second problem sounds like it may be either a cracked resistor or
a cracked PC trace. Troubleshoot the resistor by pushing on each
resistor with the eraser end of a pencil. Resistors can overheat and
crack, and still look perfect. A little sideways force and they fall
in half! It could also be just a cracked solder joint, same
technique, just poke around with your stick and see if you can make it
happen. From your description, it's almost certain to be in the audio
stages, possibly the detectors IF it does it on SSB and AM.

Of course exercising the switches is a good idea, plus treatment with
DeoxIT.

PC board trace cracks can be detected by the pencil technique as well,
and sometimes with a BRIGHT light behind the board, examining each
trace for 'light leaks'! :-)

Let us know!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Geoffrey S. Mendelson wrote:
> I have an SPR-4 with some problems. I thought they might be
> idiosyncrasies until I picked up another SPR-4 which does not have these
> problems.
>
> The first is tuning. The tuning knob takes some force to move in either
> direction, the one on the "new" radio spins smooth as silk. At some
> points on the dial it goes "thunk", needs more force and then moves. It
> does tune as you move it.
>
> I've replaced the rubber tube. With the knob off there is a small silver
> colored shaft which rotates (and tunes) freely. The dial does not move,
> and it has a limited amount of rotation.
>
> Turning the outer shaft, which does move the dial, is difficult.
>
> The second problem is that the radio goes "click" or "tick" and becomes
> almost silent. A previously unheard, low level hum comes out of the
> speaker. The S-meter continues to read normally.
>
> This goes on for a few seconds to several minutes and then goes back to
> normal. It happens in all modes.
>
> Changing the settings of any of the switches does nothing.
>
> Sometimes a local FM station can be heard muffled in the background if
> the audio gain is turned all the way up.
>
> Note that I am in Jerusalem, so recommendations for repair people, or
> offers to look at it need to be from people in Israel.
>
> Thanks in advance for any help.
>
> Geoff.
>

[Non-text portions of this message have been removed]

13773. Re: [DrakeRadio] No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 12:49:09 UTC
From: Mark Pilant
Topic: 13769 Message: 13773

The mixed knobs (w/ & w/o setscrew) situation is also the case for my TR-3 and TR-4. Just another data point; for anyone keeping track :-)

73

- Mark N1VQW

13774. Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:07:49 UTC
From: Barry
Topic: 13774 Message: 13774

I seem to recall these being a bit hard to find. These seem a bit pricey, but they are the better kind. Anyway, just happened to see them this morning and thought I'd pass it along.

http://tubedepot.com/p-fh-fender-nos.html

Regards,
Barry - N4BUQ

13775. Re: [DrakeRadio] No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:10:19 UTC
From: Steve Wedge
Topic: 13769 Message: 13775

I try to keep everything as original as possible but will change 'em out of they're too close to/rubbing the panel. Originality is one reason but another reason is so that all the knobs look to be about the same age.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Mark Pilant
Sent: Thursday, May 16, 2013 8:49 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] No-screw Knobs on the R-4B

The mixed knobs (w/ & w/o setscrew) situation is also the case for
my TR-3 and TR-4. Just another data point; for anyone keeping
track :-)

73

- Mark N1VQW

[Non-text portions of this message have been removed]

13776. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:10:57 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13776

On 05/15/2013 08:47 PM, Garey Barrell wrote:

> See <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm> for
> an article on the C-Line PTO. Same as SPR-4, just single dial.
> Problem is most likely swollen nylon gears from petroleum based
> lubricant. Nylon(and Brass) gears do NOT need oil or grease....

Garey, thanks.

I read the article and decided my best shot was lubricate the ball bearings.

I made this decision based on the following observations and that my requests on local lists for someone who is familiar with Drake 4 line radios received no replies:

1. The radio looked like it had been in an outside shed for the last 20 years.

2. It came with a box of spare #47 bulbs but the ones in the radio were burnt out, so it was unlikely anyone had been in it.

3. It had been dropped on it's back (the chassis around the speaker jack was pushed in), it may have been dropped on it's front too.

4. Looking in from the top showed no traces of oil on the bearings, but it was NOT a close inspection. There are two water/rust stains on top of the metal cover the light bulb clamps into. They also may be other substances like coffee, tea or coca-cola, I can't tell.

I opened it up, and very carefully located the ball bearings. They were covered with this dark brown goo, which looked like it was grease 30 years ago and now had dried up.

Using a q-tip, I carefully applied 3 drops of sewing machine oil, one at a time, to the bearings, which dissolved the old grease and a lot of it came up with them. They now seem to be well lubricated.

The dial still is very stiff to turn, but not as bad as before. It still goes bump and skips every once in a while. If I am not careful, the tuning knob pops off.

If I am slow and careful, it will tune from 0 to 500.

While I had the radio open, I tried adjusting the dials by pressing the clutch levers. I found that if I pressed the lever closest to the center of the radio, the dials would spin freely. You can go from 0 to 500 with no restrictions, no bumping, and a very light pressure on the tuning knob.

Release the clutch and it went back to normal. :-(

Any ideas? All suggestions would be appreciated.

Thanks in advance, Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13777. Re: [DrakeRadio] No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:25:21 UTC
From: Garey Barrell
Topic: 13769 Message: 13777

Mark -

True... I may be mistaken, but I believe it wasalways the AF GAIN
control that had the push-on.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark Pilant wrote:
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> my TR-3 and TR-4. Just another data point; for anyone keeping
> track :-)
>
> 73
>
> - Mark N1VQW
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
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>

13778. Re: [R-390] Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:32:22 UTC
From: Don Cunningham
Topic: 13778 Message: 13778

Barry,

If you search for tr7dude, you will find a link to John Kriner's Ebay Store.
John still works for R.L. Drake and sells off some of their old stock. He
has some of those nice Littlefuse holders for $1 each until they are gone.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6327 - Release Date: 05/15/13

13779. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 13:42:58 UTC
From: Garey Barrell
Topic: 13746 Message: 13779

Geoff -

OK. Yes, the axle grease that Drake used 30+ years ago has long since dried out. It also forms little rock-hard 'clumps' that can account for some crunching or 'bumping' of the tuning, causing the receiver to skip frequency. Best is to clean ALL the old grease out, then re-lubricate with a drop or two of oil. it's not a 'high speed' or heavily loaded bearing, so really doesn't need grease. There is also an Allen head set screw at the back end of the drive screw to adjust the bearing pressure. It should be tightened just enough to take out any side play of theMAIN TUNING knob.

If the receiver has been dropped, it's possible that there is a slight bend in the main tuning shaft.

The problem with oil on the nylon gears isn't visible, just a drop or two of oil on the hub/shaft can swell them enough to bind. As you found, if you disengage the gearing, the nylongears should spin freely ontheir shaft..

Steve may have some more ideas, he's just been going through an SPR-4. I've never had one, so a bit in the dark.

You will find more Drake expertise here than anywhere else! :-)
Welcome to the group.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Geoffrey S. Mendelson wrote:
> On 05/15/2013 08:47 PM, Garey Barrell wrote:
>
>> See <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm> for
>> an article on the C-Line PTO. Same as SPR-4, just single dial.
>> Problem is most likely swollen nylon gears from petroleum based
>> lubricant. Nylon(and Brass) gears do NOT need oil or grease....
> Garey, thanks.
>
> I read the article and decided my best shot was lubricate the ball bearings.
>
> I made this decision based on the following observations and that my
> requests on local lists for someone who is familiar with Drake 4 line
> radios received no replies:

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> 1. The radio looked like it had been in an outside shed for the last 20
> years.
>
> 2. It came with a box of spare #47 bulbs but the ones in the radio were
> burnt out, so it was unlikely anyone had been in it.
>
> 3. It had been dropped on it's back (the chassis around the speaker jack
> was pushed in), it may have been dropped on it's front too.
>
> 4. Looking in from the top showed no traces of oil on the bearings, but
> it was NOT a close inspection. There are two water/rust stains on top of
> the metal cover the light bulb clamps into. They also may be other
> substances like coffee, tea or coca-cola, I can't tell.
>
> I opened it up, and very carefully located the ball bearings. They were
> covered with this dark brown goo, which looked like it was grease 30
> years ago and now had dried up.
>
> Using a q-tip, I carefully applied 3 drops of sewing machine oil, one at
> a time, to the bearings, which dissolved the old grease and a lot of it
> came up with them. They now seem to be well lubricated.
>
> The dial still is very stiff to turn, but not as bad as before. It still
> goes bump and skips every once in a while. If I am not careful, the
> tuning knob pops off.
>
> If I am slow and careful, it will tune from 0 to 500.
>
> While I had the radio open, I tried adjusting the dials by pressing the
> clutch levers. I found that if I pressed the lever closest to the center
> of the radio, the dials would spin freely. You can go from 0 to 500 with
> no restrictions, no bumping, and a very light pressure on the tuning knob.
>
> Release the clutch and it went back to normal. :-(
>
> Any ideas? All suggestions would be appreciated.
>
> Thanks in advance, Geoff.
>
>

13780. Re: [R-390] Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 14:42:19 UTC
From: Barry
Topic: 13778 Message: 13780

I didn't know John had them. Good to know. I don't need any but I seem to recall someone else asking about them not too long ago and I got rid of just about all I had.

Is Drake still in business? I thought they closed permanently about a year or so ago.

Thanks,
Barry - N4BUQ

> Barry,
>
> If you search for tr7dude, you will find a link to John Kriner's Ebay
> Store.
> John still works for R.L. Drake and sells off some of their old
> stock. He
> has some of those nice Littlefuse holders for $1 each until they are
> gone.
> 73,
> Don, WB5HAK

13781. Re: [R-390] Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 14:48:59 UTC
From: Don Cunningham
Topic: 13778 Message: 13781

I don't have personal knowledge about Drake, just that they still show a web presence and it is mostly Cable TV stuff now. Last I knew, John still works in their service department and sells off mostly Drake Radio pieces left on Ebay. John is good to work with, and has helped me with many Drake repairs. I found these fuseholders while looking his website over for some Drake parts.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6329 - Release Date: 05/16/13

13782. Re: [DrakeRadio] No-screw Knobs on the R-4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 16:48:19 UTC
From: Mark Pilant
Topic: 13769 Message: 13782

Hi Garey.

> True... I may be mistaken, but I believe it was always the AF GAIN
> control that had the push-on.

I just check to see exactly which knobs were push on:

TR-3 Rcv & Xmt Gain

TR-4 Rcv & Xmt Gain, Plate, Load, and RF Tune

The knobs on the TR-4, while the same style, may not all be original.
Somewhere along the line, someone(s) else had tinkered with the rig.
My adventures getting it back to original are in the archives :-)

I also bought a bunch of replacement knobs which all have setscrews.

73

- Mark N1VQW

13783. Re: [R-390] Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 17:16:13 UTC
From: Barry
Topic: 13778 Message: 13783

The ones from RS, Mouser, etc., are not typically as well made as the old LittleFuse holders. A lot of BA gear used the LittleFuse holders (or equivalent).

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "MICHAEL FISCH" <mfisch@...>
> To: "Don Cunningham" <donc@...>, "Barry" <n4buq@...>, r-390@...,
> drakeradio@yahoogroups.com
> Sent: Thursday, May 16, 2013 10:53:51 AM
> Subject: RE: [R-390] Fuse Holders
>
> I think radio shack still has them. No idea of quality.
> Mike

13784. Re: [DrakeRadio] Re: Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 17:27:20 UTC
From: Chris Musselman
Topic: 13778 Message: 13784

I just bought a panel-mount fuse holder at Radio Shack after temporarily taking one out of a spare Tektronix chassis from the 1970s or early 1980s. I was surprised, but they were about identical. They even had the same number on them (R3-14D). I am sure the RS one is made in China.

Chris W6ATV

On 5/16/2013 10:16 AM, Barry wrote:
> The ones from RS, Mouser, etc., are not typically as well made as the
> old LittleFuse holders. A lot of BA gear used the LittleFuse holders
> (or equivalent).
>
> Regards, Barry - N4BUQ
>
> ----- Original Message -----
>> From: "MICHAEL FISCH" <mfisch@...>

>> I think radio shack still has them. No idea of quality. Mike
>

13785. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 17:45:48 UTC
From: Steve Wedge
Topic: 13746 Message: 13785

I was fortunate in that I did not have any problems with the PTO mechanicals on the SPR-4 that I had. The PO had taken all the electronics off and I had to put it back together (as well as the Power Supply/AGC PCB) but I lucked out.

Garey has an excellent point as far as bent shafts go. If there's no oil on anything, if you take it apart and go through Ron's procedure, you will get no change. If the oil was not visible, you may fix the problem. I'm hoping you'll not find anything bent, as that will be a lot harder to fix.

I otherwise had the usual issues of dirty contacts and having to re-tighten grounding screws.

They're nice receivers and a big improvement over the SW-4A, in that it has a BFO and thus USB/LSB/CW modes. You can listen to ham bands with it as well as all sorts of other SW BC.

If you still have the AC power cord, beware of where the plastic body meets the wiring on the rig end. I got a nasty zap from exposed conductors at the junction of the connector and the cord. There's no real fix for this other than cutting it off and either hard-wiring it or using Molex pins and clearly marking where everything goes!

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, May 16, 2013 9:42 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] SPR-4 problems

Geoff -

OK. Yes, the axle grease that Drake used 30+ years ago has long since
dried out. It also forms little rock-hard 'clumps' that can account
for some crunching or 'bumping' of the tuning, causing the receiver to
skip frequency. Best is to clean ALL the old grease out, then
re-lubricate with a drop or two of oil. it's not a 'high speed' or
heavily loaded bearing, so really doesn't need grease. There is also
an Allen head set screw at the back end of the drive screw to adjust
the bearing pressure. It should be tightened just enough to take out
any side play of theMAIN TUNING knob.

If the receiver has been dropped, it's possible that there is a slight
bend in the main tuning shaft.

The problem with oil on the nylon gears isn't visible, just a drop or
two of oil on the hub/shaft can swell them enough to bind. As you
found, if you disengage the gearing, the nylongears should spin freely
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I've never had one, so a bit in the dark.

You will find more Drake expertise here than anywhere else! :-)
Welcome to the group.....

73, Garey - K4OAH
Glen Allen, VA

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Geoffrey S. Mendelson wrote:
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> no restrictions, no bumping, and a very light pressure on the tuning knob.
>
> Release the clutch and it went back to normal. :-(
>
> Any ideas? All suggestions would be appreciated.
>
> Thanks in advance, Geoff.
>
>

[Non-text portions of this message have been removed]

13786. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 18:16:47 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13786

On 05/16/2013 08:45 PM, Steve Wedge wrote:
> I was fortunate in that I did not have any problems with the PTO
> mechanicals on the SPR-4 that I had. The PO had taken all the
> electronics off and I had to put it back together (as well as the Power
> Supply/AGC PCB) but I lucked out.

I guess that makes it easier. This one was brought here in the 1970's when someone moved here from the US and wanted a radio to listen to the BBC, etc. As far as I am concerned he made an excellent choice. :-)

It looks like it sat ignored in his shed for about 20 years, maybe longer. A little rust around the edges (mostly on screw heads) and except for the stuck dial and a banged up rear (which may have occurred later), it is in good shape.

When I first got it, I cleaned as much as I could with deoxit (the red liquid) very carefully. I also replaced the bulbs with LEDs and the rubber tuning buffer with gas hose.

Recently someone posted a link to vendor of drake specific parts and I replaced the LEDs with the correct bulbs and the rubber buffer with a correct one.

It has a few extra crystals, calibrator and noise blanker. I probably could remove them and sell them for more than the radio is worth (someone is selling the noise blanker for $250 and the crystals for $15 each on eBay), but the thought sickens me.

> Garey has an excellent point as far as bent shafts go. If there's no oil
> on anything, if you take it apart and go through Ron's procedure, you
> will get no change. If the oil was not visible, you may fix the problem.
> I'm hoping you'll not find anything bent, as that will be a lot harder
> to fix.

I was unable to find anyone local who fixes 4 line radios, but I may get an answer in a few days if someone knows someone who is not on-line.

If not, I asked a local ham who is an amateur machinist if he would be willing to do it.

> I otherwise had the usual issues of dirty contacts and having to
> re-tighten grounding screws.
>
> They're nice receivers and a big improvement over the SW-4A, in that it
> has a BFO and thus USB/LSB/CW modes. You can listen to ham bands with it
> as well as all sorts of other SW BC.

This one has 7, 14 and 21 mHz, but not 10m. 14mHz is off by exactly 13khz, so I expect it has a regular 4 line crystal in it, not an SPR-4 specific one. 3.5mHz is worthless here because of all the computers, etc. (it does not have it anyway)

Back when the BBC was beaming signals in this general direction, it was the most pleasant sounding receiver I have owned.

> If you still have the AC power cord, beware of where the plastic body
> meets the wiring on the rig end. I got a nasty zap from exposed
> conductors at the junction of the connector and the cord. There's no
> real fix for this other than cutting it off and either hard-wiring it or
> using Molex pins and clearly marking where everything goes!

Thanks, I'll check it carefully.

Thanks for the information, advice and support, I appreciate it.

73,

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13787. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 19:55:13 UTC
From: Garey Barrell
Topic: 13746 Message: 13787

Steve -

I was just cruising through some old price lists of parts from Drake.
The uA923 was $20 as a repair part. The standard (SS) knob was $1.25
and the push-on was $0.45. Probably cost half that in production
quantities. $0.80 difference in material cost wouldn't seem to be
worthwhile on a $400 receiver!!?!?!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> All my computers have my signature with various pearls of wisdom appended thereto.
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>
>
> From: Garey Barrell
> Sent: Thursday, May 16, 2013 9:42 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] SPR-4 problems
>
>
>
> Geoff -
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> dried out. It also forms little rock-hard 'clumps' that can account
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>> Release the clutch and it went back to normal. :-(
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>> Any ideas? All suggestions would be appreciated.
>>
>> Thanks in advance, Geoff.
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13788. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 20:05:19 UTC
From: Don Cunningham
Topic: 13746 Message: 13788

Garey,

T'wasn't the engineer making those penny decisions, but the "bean counters" sure did, HI. I always wondered about that decision myself. Was the push-on price with the spring?? That could make the difference less. THAT is the part I always broke, trying to get the knob just a little bit snugger.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6329 - Release Date: 05/16/13

[Non-text portions of this message have been removed]

13789. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 20:10:20 UTC
From: Garey Barrell
Topic: 13746 Message: 13789

Don -

Oh yes, I'm well aware of the bean counter effect. That was not a problemat NASA or NRAO however, cause that was 'gum-mint' money and there was plenty more where that came from..!!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> T'wasn't the engineer making those penny decisions, but the "bean counters" sure did, HI. I always wondered about that decision myself. Was the push-on price with the spring?? That could make the difference less. THAT is the part I always broke, trying to get the knob just a little bit snugger.
> 73,
> Don, WB5HAK
>
>

13790. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 20:18:14 UTC
From: Don Cunningham
Topic: 13746 Message: 13790

Garey,

If you have Dish Network, you might enjoy a program or two of space documentaries. They are on the Science Channel, I think and every time I see them, I think of your involvement and watch for you. Actually there are two of them, one goes from the early Mercury missions through all of Apollo. Lots of film in the Huntsville area as well as others getting the rockets to go up, not out, HI. The other series is about the machines of the space program. Both are EXCELLENT.

I'll try to remember to email when I see them coming on again.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6329 - Release Date: 05/16/13

[Non-text portions of this message have been removed]

13791. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 20:28:22 UTC
From: Richard Knoppow
Topic: 13746 Message: 13791

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 16, 2013 12:55 PM
Subject: Re: [DrakeRadio] SPR-4 problems

> Steve -
>
> I was just cruising through some old price lists of parts
> from Drake.
> The uA923 was $20 as a repair part. The standard (SS)
> knob was $1.25
> and the push-on was $0.45. Probably cost half that in
> production
> quantities. $0.80 difference in material cost wouldn't
> seem to be
> worthwhile on a $400 receiver!!?!?!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

I always associate push-on knobs with consumer radios.
Now, someone I think mentioned knobs rubbing on the panel.
Not sure if this referred to the push-on kind or the set
screw kind but one answer is to copy the old radios and put
a felt washer under the knob. Washers are available from a
couple of places that sell restoration parts for old radios
but they are very easy to make. I use a paper punch to make
the center holes. Haven't tried a leather punch but that
would probably also work.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13792. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 21:45:21 UTC
From: Garey Barrell
Topic: 13746 Message: 13792

Hi Don -

I have the Science Channel on ROKU. I'll have to check the schedule
and see what's up. I was there from late Mercury through Apollo 14.
August '71 I switched to Radio Astronomy at NRAO to look a little
further out with the VLA! :-) Wish I could claim the Hubble, I think
that's the'coolest'!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Garey,
>
> If you have Dish Network, you might enjoy a program or two of space documentaries. They are on the Science Channel, I think and every time I see them, I think of your involvement and watch for you. Actually there are two of them, one goes from the early Mercury missions through all of Apollo. Lots of film in the Huntsville area as well as others getting the rockets to go up, not out, HI. The other series is about the machines of the space program. Both are EXCELLENT.
>
> I'll try to remember to email when I see them coming on again.
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3336 / Virus Database: 3162/6329 - Release Date: 05/16/13
>
>
> [Non-text portions of this message have been removed]
>
>
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> ------------------------------------
>
> Yahoo! Groups Links
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>
>

>

13793. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 21:47:13 UTC
From: Garey Barrell
Topic: 13746 Message: 13793

I took a more scientific approach early on. Just stuff a wad of
solder up inside the knob before installing. Worked fine, but finally
just switched everything over toSS types.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, May 16, 2013 12:55 PM
> Subject: Re: [DrakeRadio] SPR-4 problems
>
>
>> Steve -
>>
>> I was just cruising through some old price lists of parts
>> from Drake.
>> The uA923 was $20 as a repair part. The standard (SS)
>> knob was $1.25
>> and the push-on was $0.45. Probably cost half that in
>> production
>> quantities. $0.80 difference in material cost wouldn't
>> seem to be
>> worthwhile on a $400 receiver!!?!?!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
> I always associate push-on knobs with consumer radios.
> Now, someone I think mentioned knobs rubbing on the panel.
> Not sure if this referred to the push-on kind or the set
> screw kind but one answer is to copy the old radios and put
> a felt washer under the knob. Washers are available from a
> couple of places that sell restoration parts for old radios
> but they are very easy to make. I use a paper punch to make
> the center holes. Haven't tried a leather punch but that
> would probably also work.
>
>
> --

> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
>

13794. Classic Space Programs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 22:03:39 UTC
From: Don Cunningham
Topic: 13794 Message: 13794

Garey,

One final post to help find the shows. The "series" was first shown shortly after Neil Armstrong's death. It was done all one day long, and I got a chance for once to settle in and watch it all in a string. I have just caught bits and pieces since. However, keep your eye out for a "marathon" space day again. Often done on holiday weekends (maybe Memorial weekend??).

Back to Drakes, hi.
73,
Don

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3336 / Virus Database: 3162/6329 - Release Date: 05/16/13

[Non-text portions of this message have been removed]

13795. Nice Drake L75 amp for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-16 22:59:59 UTC
From: Tom
Topic: 13795 Message: 13795

I am considering selling my L75 amp. It is in excellent condition, located in Virginia. If there is anyone here that is interested, please contact me at tmoll150@....
Thanks,
Tom NØBS

13796. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 00:47:40 UTC
From: Steve Wedge
Topic: 13746 Message: 13796

Of course, one thing I did learn is that if you save a buck and you build 5000 units, you've saved $5000.

I can remember sitting in meetings when such things were discussed.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On May 16, 2013, at 3:55 PM, Garey Barrell <k4oah@...> wrote:

> Steve -
>
> I was just cruising through some old price lists of parts from Drake.
> The uA923 was $20 as a repair part. The standard (SS) knob was $1.25
> and the push-on was $0.45. Probably cost half that in production
> quantities. $0.80 difference in material cost wouldn't seem to be
> worthwhile on a $400 receiver!!?!?!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
> > I was fortunate in that I did not have any problems with the PTO mechanicals on the SPR-4 that I had. The PO had taken all the electronics off and I had to put it back together (as well as the Power Supply/AGC PCB) but I lucked out.
> >
> > Garey has an excellent point as far as bent shafts go. If there's no oil on anything, if you take it apart and go through Ron's procedure, you will get no change. If the oil was not visible, you may fix the problem. I'm hoping you'll not find anything bent, as that will be a lot harder to fix.
> >
> > I otherwise had the usual issues of dirty contacts and having to re-tighten grounding screws.
> >
> > They're nice receivers and a big improvement over the SW-4A, in that it has a BFO and thus USB/LSB/CW modes. You can listen to ham bands with it as well as all sorts of other SW BC.
> >
> > If you still have the AC power cord, beware of where the plastic body meets the wiring on the rig end. I got a nasty zap from exposed conductors at the junction of the connector and the cord. There's no real fix for this other than cutting it off and either hard-wiring

it or using Molex pins and clearly marking where everything goes!
> >
> > 73,
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
> >
> >
> > All my computers have my signature with various pearls of wisdom appended thereto.
> >
> >
> >
> > From: Garey Barrell
> > Sent: Thursday, May 16, 2013 9:42 AM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] SPR-4 problems
> >
> >
> >
> > Geoff -
> >
> > OK. Yes, the axle grease that Drake used 30+ years ago has long since
> > dried out. It also forms little rock-hard 'clumps' that can account
> > for some crunching or 'bumping' of the tuning, causing the receiver to
> > skip frequency. Best is to clean ALL the old grease out, then
> > re-lubricate with a drop or two of oil. it's not a 'high speed' or
> > heavily loaded bearing, so really doesn't need grease. There is also
> > an Allen head set screw at the back end of the drive screw to adjust
> > the bearing pressure. It should be tightened just enough to take out
> > any side play of theMAIN TUNING knob.
> >
> > If the receiver has been dropped, it's possible that there is a slight
> > bend in the main tuning shaft.
> >
> > The problem with oil on the nylon gears isn't visible, just a drop or
> > two of oil on the hub/shaft can swell them enough to bind. As you
> > found, if you disengage the gearing, the nylongears should spin freely
> > ontheir shaft..
> >
> > Steve may have some more ideas, he's just been going through an SPR-4.
> > I've never had one, so a bit in the dark.
> >
> > You will find more Drake expertise here than anywhere else! :-)
> > Welcome to the group.....
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs

> > <www.k4oah.com>
> >
> > Geoffrey S. Mendelson wrote:
> >> On 05/15/2013 08:47 PM, Garey Barrell wrote:
> >>
> >>> See <http://www.wb4hfn.com/DRAKE/DrakeArticles/PTO/Drake_PTO.htm> for
> >>> an article on the C-Line PTO. Same as SPR-4, just single dial.
> >>> Problem is most likely swollen nylon gears from petroleum based
> >>> lubricant. Nylon(and Brass) gears do NOT need oil or grease....
> >> Garey, thanks.
> >>
> >> I read the article and decided my best shot was lubricate the ball bearings.
> >>
> >> I made this decision based on the following observations and that my
> >> requests on local lists for someone who is familiar with Drake 4 line
> >> radios received no replies:
> >>
> >> 1. The radio looked like it had been in an outside shed for the last 20
> >> years.
> >>
> >> 2. It came with a box of spare #47 bulbs but the ones in the radio were
> >> burnt out, so it was unlikely anyone had been in it.
> >>
> >> 3. It had been dropped on it's back (the chassis around the speaker jack
> >> was pushed in), it may have been dropped on it's front too.
> >>
> >> 4. Looking in from the top showed no traces of oil on the bearings, but
> >> it was NOT a close inspection. There are two water/rust stains on top of
> >> the metal cover the light bulb clamps into. They also may be other
> >> substances like coffee, tea or coca-cola, I can't tell.
> >>
> >> I opened it up, and very carefully located the ball bearings. They were
> >> covered with this dark brown goo, which looked like it was grease 30
> >> years ago and now had dried up.
> >>
> >> Using a q-tip, I carefully applied 3 drops of sewing machine oil, one at
> >> a time, to the bearings, which dissolved the old grease and a lot of it
> >> came up with them. They now seem to be well lubricated.
> >>
> >> The dial still is very stiff to turn, but not as bad as before. It still
> >> goes bump and skips every once in a while. If I am not careful, the
> >> tuning knob pops off.
> >>
> >> If I am slow and careful, it will tune from 0 to 500.
> >>
> >> While I had the radio open, I tried adjusting the dials by pressing the
> >> clutch levers. I found that if I pressed the lever closest to the center
> >> of the radio, the dials would spin freely. You can go from 0 to 500 with
> >> no restrictions, no bumping, and a very light pressure on the tuning knob.
> >>

> >> Release the clutch and it went back to normal. :-(
> >>
> >> Any ideas? All suggestions would be appreciated.
> >>
> >> Thanks in advance, Geoff.
> >>
> >>
>
>

[Non-text portions of this message have been removed]

13797. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 00:49:48 UTC
From: Steve Wedge
Topic: 13746 Message: 13797

I put a nickel under each knob when reinstalling as a spacer. Of course, I don't draw it down too tight!

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On May 16, 2013, at 4:28 PM, "Richard Knoppow" <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, May 16, 2013 12:55 PM
> Subject: Re: [DrakeRadio] SPR-4 problems
>
> > Steve -
> >
> > I was just cruising through some old price lists of parts
> > from Drake.
> > The uA923 was $20 as a repair part. The standard (SS)
> > knob was $1.25
> > and the push-on was $0.45. Probably cost half that in
> > production
> > quantities. $0.80 difference in material cost wouldn't
> > seem to be
> > worthwhile on a $400 receiver!!?!?!
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> I always associate push-on knobs with consumer radios.
> Now, someone I think mentioned knobs rubbing on the panel.
> Not sure if this referred to the push-on kind or the set
> screw kind but one answer is to copy the old radios and put
> a felt washer under the knob. Washers are available from a
> couple of places that sell restoration parts for old radios
> but they are very easy to make. I use a paper punch to make
> the center holes. Haven't tried a leather punch but that
> would probably also work.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...

>
>

[Non-text portions of this message have been removed]

13798. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 01:31:46 UTC
From: Steve Wedge
Topic: 13746 Message: 13798

I'll briefly throw in the comment that the crystals are not compatible to the 4-lines. The SPR-4 uses the smaller size (can't remember the designator).

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 16, 2013, at 2:16 PM, "Geoffrey S. Mendelson" <geoffreymendelson@...> wrote:

> On 05/16/2013 08:45 PM, Steve Wedge wrote:
>> I was fortunate in that I did not have any problems with the PTO
>> mechanicals on the SPR-4 that I had. The PO had taken all the
>> electronics off and I had to put it back together (as well as the Power
>> Supply/AGC PCB) but I lucked out.
>
> I guess that makes it easier. This one was brought here in the 1970's
> when someone moved here from the US and wanted a radio to listen to the
> BBC, etc. As far as I am concerned he made an excellent choice. :-)
>
>
> It looks like it sat ignored in his shed for about 20 years, maybe
> longer. A little rust around the edges (mostly on screw heads) and
> except for the stuck dial and a banged up rear (which may have occurred
> later), it is in good shape.
>
> When I first got it, I cleaned as much as I could with deoxit (the red
> liquid) very carefully. I also replaced the bulbs with LEDs and the
> rubber tuning buffer with gas hose.
>
> Recently someone posted a link to vendor of drake specific parts and I
> replaced the LEDs with the correct bulbs and the rubber buffer with a
> correct one.
>
>
> It has a few extra crystals, calibrator and noise blanker. I probably
> could remove them and sell them for more than the radio is worth
> (someone is selling the noise blanker for $250 and the crystals for $15
> each on eBay), but the thought sickens me.
>
>> Garey has an excellent point as far as bent shafts go. If there's no oil
>> on anything, if you take it apart and go through Ron's procedure, you
>> will get no change. If the oil was not visible, you may fix the problem.
>> I'm hoping you'll not find anything bent, as that will be a lot harder
>> to fix.
>
> I was unable to find anyone local who fixes 4 line radios, but I may get
> an answer in a few days if someone knows someone who is not on-line.

>
> If not, I asked a local ham who is an amateur machinist if he would be
> willing to do it.
>
>
>> I otherwise had the usual issues of dirty contacts and having to
>> re-tighten grounding screws.
>>
>> They're nice receivers and a big improvement over the SW-4A, in that it
>> has a BFO and thus USB/LSB/CW modes. You can listen to ham bands with it
>> as well as all sorts of other SW BC.
>
> This one has 7, 14 and 21 mHz, but not 10m. 14mHz is off by exactly
> 13khz, so I expect it has a regular 4 line crystal in it, not an SPR-4
> specific one. 3.5mHz is worthless here because of all the computers,
> etc. (it does not have it anyway)
>
> Back when the BBC was beaming signals in this general direction, it was
> the most pleasant sounding receiver I have owned.
>
>
>> If you still have the AC power cord, beware of where the plastic body
>> meets the wiring on the rig end. I got a nasty zap from exposed
>> conductors at the junction of the connector and the cord. There's no
>> real fix for this other than cutting it off and either hard-wiring it or
>> using Molex pins and clearly marking where everything goes!
>
> Thanks, I'll check it carefully.
>
>
> Thanks for the information, advice and support, I appreciate it.
>
> 73,
>
> Geoff.
>
>
> --
> Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
> It's Spring here in Jerusalem!!!
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

13799. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 03:40:34 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13799

On 05/17/2013 03:47 AM, Steve Wedge wrote:
> Of course, one thing I did learn is that if you save a buck and you
> build 5000 units, you've saved $5000.
>
> I can remember sitting in meetings when such things were discussed.

In the early 1960's $5000 would buy you a house, or a cadilac or a Jaguar.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13800. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 13:34:41 UTC
From: Garey Barrell
Topic: 13746 Message: 13800

> On 05/17/2013 03:47 AM, Steve Wedge wrote:
>> Of course, one thing I did learn is that if you save a buck and you
>> build 5000 units, you've saved $5000.
>>
>> I can remember sitting in meetings when such things were discussed.

Fortunately, once in a while the engineer would stand up and say,
"Yes, but how much have you LOST when the crappy part fails and your
sales drop 10%?" Once in a great while, I'd win!! :-)

73, Garey - K4OAH
Glen Allen, VA

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<www.k4oah.com>

13801. Re: Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 15:37:13 UTC
From: km5z_mike
Topic: 13774 Message: 13801

I saw that - got the same email flyer.

I believe that's a Littelfuse 342014, possibly?
If not that identical part, then made-like.
There are VERY few of those out there - hard to find indeed.

I believe http://www.ralphselectronics.com
still has the 'knurled' styled cap version of this, but out of stock
on this particular style cap.
Talonix.com is now out of stock at $1.42, so I guess the $4.95 is
now a bargain.

The 1/2 inch hole is particular. I just fixed a broken fuse holder
in a Curtis EK-39, and there is NO ROOM to drill that out to fit
the now larger fuse holders.

Plus it has the old look.

Mike Y

--- In DrakeRadio@yahoogroups.com, Barry <n4buq@...> wrote:
>
> I seem to recall these being a bit hard to find. These seem a bit pricey, but they are the better kind. Anyway, just happened to see them this morning and thought I'd pass it along.
>
> http://tubedepot.com/p-fh-fender-nos.html
>
> Regards,
> Barry - N4BUQ
>

13802. Greetings and info request....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 19:19:20 UTC
From: Linden J. Allen
Topic: 13802 Message: 13802

Hello all,

Despite indications to the contrary, my call is not M6TGT, its 2E0TGT its just that Yahoo won't let me update it!!!! Anyway, greetings to you all!!

I've just got my hands on a very sweet looking Tono 9000E Comms Terminal - yep, a bit old in computing terms but I like retro stuff, its rather like me in many ways lol (somewhat temperamental, occasional malfunctions and getting less tolerant as the years progress).

My only problem with it, is a lack of manual, the link that was posted some time ago on this site is no longer functioning, so this is a bit of long shot: Does anybody have one which the could copy for me please or have any idea where I may get one??? Please don't mention Dayton - I'd love to come but really cant afford the air fare at the moment :) I'm more than happy to cover copy and postage fee's.

Many thanks. Lin 2E0TGT 73's

13803. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-17 21:21:32 UTC
From: Steve Wedge
Topic: 13746 Message: 13803

Yup. especially with parts that are handled by the user. components can be changed for efficiency or cost with nobody the wiser (except for folks like us...). Still, I'd be willing to bet that a lot of folks who bought these rigs new didn't even notice!

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Friday, May 17, 2013 9:34 AM
Subject: Re: [DrakeRadio] SPR-4 problems

> On 05/17/2013 03:47 AM, Steve Wedge wrote:
>> Of course, one thing I did learn is that if you save a buck and you
>> build 5000 units, you've saved $5000.
>>
>> I can remember sitting in meetings when such things were discussed.

Fortunately, once in a while the engineer would stand up and say,
"Yes, but how much have you LOST when the crappy part fails and your
sales drop 10%?" Once in a great while, I'd win!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

13804. Re: Greetings and info request....

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 10:15:43 UTC
From: dodgy_dxer
Topic: 13802 Message: 13804

Seems to be available from here

http://marketplaceadvisor.channeladvisor.com/StoreFrontProfiles/DeluxeSFItemDetail.aspx?sid=1&sfid=86409&c=15467&i=68238226

73 Fred
A65BD - G4BWP

--- In DrakeRadio@yahoogroups.com, "Linden J. Allen" <l.j.allen@...> wrote:
>
> Hello all,
>
> Despite indications to the contrary, my call is not M6TGT, its 2E0TGT its just that Yahoo won't let me update it!!!! Anyway, greetings to you all!!
>
> I've just got my hands on a very sweet looking Tono 9000E Comms Terminal - yep, a bit old in computing terms but I like retro stuff, its rather like me in many ways lol (somewhat temperamental, occasional malfunctions and getting less tolerant as the years progress).
>
> My only problem with it, is a lack of manual, the link that was posted some time ago on this site is no longer functioning, so this is a bit of long shot: Does anybody have one which the could copy for me please or have any idea where I may get one??? Please don't mention Dayton - I'd love to come but really cant afford the air fare at the moment :) I'm more than happy to cover copy and postage fee's.
>
> Many thanks. Lin 2E0TGT 73's
>

13805. Re: Fuse Holders

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 16:28:47 UTC
From: johnkf7z
Topic: 13774 Message: 13805

It looks like these fuse holders are also available from Nebraska Surplus. $3.95

http://www.surplussales.com/Electrical/Holders/ElecHold-2.html

> --- In DrakeRadio@yahoogroups.com, Barry <n4buq@> wrote:
> >
> > I seem to recall these being a bit hard to find. These seem a bit pricey, but they are the better kind. Anyway, just happened to see them this morning and thought I'd pass it along.
> >
> > http://tubedepot.com/p-fh-fender-nos.html
> >
> > Regards,
> > Barry - N4BUQ
> >
>

13806. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 17:34:33 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13806

On 05/18/2013 12:21 AM, Steve Wedge wrote:
> Yup. especially with parts that are handled by the user. components can
> be changed for efficiency or cost with nobody the wiser (except for
> folks like us...). Still, I'd be willing to bet that a lot of folks who
> bought these rigs new didn't even notice!

I think you are looking at it the wrong way. Although planned obsolescence was decades away, cost cutting was still on designer's minds.

Looking at it in hindsight, the last SPR-4 was made in 1976, by 1992 they were obsolete. Not obsolete in terms of being ready for the junk pile, but obsolete in terms of technology features and price.

So if you consider that they were good solid technology for at least 16 years before being eclipsed by frequency synthesizers, high quality filters, synchronous AM detection, digital frequency display, computer control, etc. it was a very good run.

The fact that we are here almost 40 years later complaining because a knob might fall off is a testament to the quality of the design and construction of these radios.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13807. member intro

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 18:06:09 UTC
From: n9lsd
Topic: 13807 Message: 13807

hello all, my name is mike, N9LSD. i live in indiana and am assembling a 4-line station, piece by piece, after a many year absence.now i need a power supply. anyone??

13808. Re: [DrakeRadio] member intro

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 18:48:08 UTC
From: GALE STEWARD
Topic: 13807 Message: 13808

Hi Mike,

Welcome! You might find an AC-4 power supply as there are lot of guys on this reflector. There are usually a few on Ebay also.

If you get an original one (original caps in the supply), I would recommend installing one of the aftermarket upgrade kits. These kits have all new components on custom PC boards and fit right in the AC-4 supply.

The ones that I have started using are from Paul, K0UYA, who is a member of the this Drake group. I have installed one of Paul's kits in the supply for my B-line and have another to install in the supply for my C-line.

Paul's Email address is elespe@...

He can send you a link for some pix of his upgrade boards installed in an AC-4.

GL with the 4-line. Is it an original R4/T4X or a newer A, B, or C-line? Just curious...

73, Stew K3ND...

From: n9lsd <m.bunner1@...>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, May 18, 2013 2:06 PM
Subject: [DrakeRadio] member intro

hello all, my name is mike, N9LSD. i live in indiana and am assembling a 4-line station, piece by piece, after a many year absence.now i need a power supply. anyone??

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13809. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-18 19:33:19 UTC
From: Steve Wedge
Topic: 13746 Message: 13809

Absolutely! One reason I have this drake "problem" is because I'm of the opinion that they were mostly well-designed high-performance radios that are still quite useable today on ssb and cw.

Even swl isn't what it used to be, but the SPR-4 acquits itself quite nicely.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 18, 2013, at 1:34 PM, "Geoffrey S. Mendelson" <geoffreymendelson@...> wrote:

> On 05/18/2013 12:21 AM, Steve Wedge wrote:
> > Yup. especially with parts that are handled by the user. components can
> > be changed for efficiency or cost with nobody the wiser (except for
> > folks like us...). Still, I'd be willing to bet that a lot of folks who
> > bought these rigs new didn't even notice!
>
> I think you are looking at it the wrong way. Although planned
> obsolescence was decades away, cost cutting was still on designer's minds.
>
> Looking at it in hindsight, the last SPR-4 was made in 1976, by 1992
> they were obsolete. Not obsolete in terms of being ready for the junk
> pile, but obsolete in terms of technology features and price.
>
> So if you consider that they were good solid technology for at least 16
> years before being eclipsed by frequency synthesizers, high quality
> filters, synchronous AM detection, digital frequency display, computer
> control, etc. it was a very good run.
>
> The fact that we are here almost 40 years later complaining because a
> knob might fall off is a testament to the quality of the design and
> construction of these radios.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
> It's Spring here in Jerusalem!!!
>

[Non-text portions of this message have been removed]

13810. Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 05:45:22 UTC
From: Richard Knoppow
Topic: 13810 Message: 13810

The tuning knob and dial on my R4B wobbles. It has play laterally. There appears to be an adjustment for end play on the shaft but I can't see how to do it. I think Garey just answered someone with a similar problem. The tuning shaft appears to be held at the panel and by a ball bearing and at the other end by a single ball. I can see what looks like a threaded collar at the back end but when I looked for a place to adjust it couldn't find anything. What am I missing? This is a fairly early receiver with metal gears.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13811. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 06:40:30 UTC
From: William Houghton
Topic: 13810 Message: 13811

Hi Richard,

It was me that asked recently. Mechanically they are all similar. That threaded collar should be an allen head screw.Take off the aluminum cover. There is a brown phenolic board held on to the gearbox with screws and spacers. There is a hole in the board material for you to insert an allen wrench. Some have said it uses a 1/8 in allen wrench, another source said 3/32 in. Mine was 3/32.

From: Richard Knoppow <1oldlens1@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 18, 2013 10:45:31 PM
Subject: [DrakeRadio] Wobbly tuning knob and dial on R4B

The tuning knob and dial on my R4B wobbles. It has play laterally. There appears to be an adjustment for end play on the shaft but I can't see how to do it. I think Garey just answered someone with a similar problem. The tuning shaft appears to be held at the panel and by a ball bearing and at the other end by a single ball. I can see what looks like a threaded collar at the back end but when I looked for a place to adjust it couldn't find anything. What am I missing? This is a fairly early receiver with metal gears.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13812. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 13:50:25 UTC
From: David Winfree
Topic: 13810 Message: 13812

Yes. Toolmakers call these items. "Threaded Spring loaded ball plungers"

On Sunday, May 19, 2013, William Houghton wrote:

> **
>
>
> Hi Richard,
>
> It was me that asked recently. Mechanically they are all similar. That
> threaded
> collar should be an allen head screw.Take off the aluminum cover. There is
> a
> brown phenolic board held on to the gearbox with screws and spacers. There
> is a
> hole in the board material for you to insert an allen wrench. Some have
> said
> it uses a 1/8 in allen wrench, another source said 3/32 in. Mine was 3/32.
>
> _____
> From: Richard Knoppow <1oldlens1@... <javascript:_e({}, 'cvml',
> '1oldlens1%40ix.netcom.com');>>
> To: DrakeRadio@yahoogroups.com <javascript:_e({}, 'cvml',
> 'DrakeRadio%40yahoogroups.com');>
> Sent: Sat, May 18, 2013 10:45:31 PM
> Subject: [DrakeRadio] Wobbly tuning knob and dial on R4B
>
>
> The tuning knob and dial on my R4B wobbles. It has play
> laterally. There appears to be an adjustment for end play
> on the shaft but I can't see how to do it. I think Garey
> just answered someone with a similar problem. The tuning
> shaft appears to be held at the panel and by a ball bearing
> and at the other end by a single ball. I can see what looks
> like a threaded collar at the back end but when I looked for
> a place to adjust it couldn't find anything. What am I
> missing? This is a fairly early receiver with metal gears.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@... <javascript:_e({}, 'cvml',
> 'dickburk%40ix.netcom.com');>
>

> [Non-text portions of this message have been removed]
>
>
>

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13813. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 14:10:15 UTC
From: Garey Barrell
Topic: 13810 Message: 13813

Richard -

Should be a 'cup' Allen head setscrew at the back end. There's a LOT
of room, so I don't think the screw fell out. Reach in with your
Xcelite!! Sorry I don't recall which size. Tighten just enoughto
take out any side play.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> The tuning knob and dial on my R4B wobbles. It has play
> laterally. There appears to be an adjustment for end play
> on the shaft but I can't see how to do it. I think Garey
> just answered someone with a similar problem. The tuning
> shaft appears to be held at the panel and by a ball bearing
> and at the other end by a single ball. I can see what looks
> like a threaded collar at the back end but when I looked for
> a place to adjust it couldn't find anything. What am I
> missing? This is a fairly early receiver with metal gears.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
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> Yahoo! Groups Links
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13814. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 16:35:42 UTC
From: Richard Knoppow
Topic: 13810 Message: 13814

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 7:10 AM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

> Richard -
>
> Should be a 'cup' Allen head setscrew at the back end.
> There's a LOT
> of room, so I don't think the screw fell out. Reach in
> with your
> Xcelite!! Sorry I don't recall which size. Tighten just
> enoughto
> take out any side play.
>
> 73, Garey - K4OAH
> Glen Allen, VA

Thanks Garey and others, I looked using a dental mirror
but couldn't see the Allen socket. I will give this a try
later. The wobble has been there since I got the receiver
but its annoying and the companion transmitter is perfectly
solid.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13815. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 18:39:34 UTC
From: Richard Knoppow
Topic: 13810 Message: 13815

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 7:10 AM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

> Richard -
>
> Should be a 'cup' Allen head setscrew at the back end.
> There's a LOT
> of room, so I don't think the screw fell out. Reach in
> with your
> Xcelite!! Sorry I don't recall which size. Tighten just
> enoughto
> take out any side play.
>
William Houghton was right, its 3/32. I used an
extra-long L wrench with a ball tip. Took maybe half a turn
to make it solid. Thank you all.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13816. CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 18:41:25 UTC
From: Richard Knoppow
Topic: 13816 Message: 13816

The side tone from my T4XB is pretty loud. Is there any
way to adjust the level? Some component change maybe.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13817. Re: [DrakeRadio] CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 18:59:46 UTC
From: Garey Barrell
Topic: 13816 Message: 13817

Richard -

How about the 'ANTI-VOX / SIDETONE' control on the right side?? :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> The side tone from my T4XB is pretty loud. Is there any
> way to adjust the level? Some component change maybe.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
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> Yahoo! Groups Links
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13818. Re: [DrakeRadio] SPR-4 problems

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 19:03:26 UTC
From: Geoffrey S. Mendelson
Topic: 13746 Message: 13818

On 05/18/2013 10:33 PM, Steve Wedge wrote:
> Absolutely! One reason I have this drake "problem" is because I'm of the
> opinion that they were mostly well-designed high-performance radios that
> are still quite useable today on ssb and cw.
>
> Even swl isn't what it used to be, but the SPR-4 acquits itself quite
> nicely.

That's because SWL is not what it used to be. During the first "Gulf War" SWL'ing became a boom industry. Radios were flying off the shelves at places like Radio Shack.

Even before them, in the late 1980's the bands were so crowded that better solutions were made to separate the stations. AM stereo had bombed by that time and manufacturers were stuck with warehouses full of AM stereo decoder chips.

One brilliant engineer at Sony took an ICF-2001 digital SW receiver, added air band, more memories, and improved the synthesizer. But his real stroke of brilliance was to take the AM stereo decoder chips and use them for shortwave reception.

One of the AM stereo systems transmitted the left channel on one sideband and the right channel on the other. On a regular AM receiver, you heard both in mono. If you had a sideband splitter, you got stereo.

Instead of using the sideband splitter for AM stereo, they sold it as a Synchronous AM detector where you chose the sideband. So if two stations were too close together, you could listen to one sideband of the station you wanted.

This radio was called the ICF-2010 (or ICF-2001d outside of the US) and I still have one. In fact, one very impressive thing about my wife when I first met her, so did she.....

Later receivers tried other things, such as the Kenwood R5000 which had a choice of wide skirt AM filter or a narrow skirt one (about $100 more). Mine had the narrow skirt one and a special 4kHz narrow skirt AM filter when the 6kHz one was too wide.

I had that radio until 2 years ago when I failed at replacing the main filter capacitor due to eyesight problems and burned out the power transformer and power supply board. Someday it may be resurrected.

I also had an NRD-535D (which I sold in 1996 when I moved here), which had an AM synch detector which worked poorly. It would easily lose lock, and howl. It also more importantly had a variable bandwidth IF filter,

so you could crank it down to the point that nearby stations were no longer heard, hopefully you would still be able to hear the station you wanted.

But these days, none of that is necessary. There are so few stations on the air that wide skirt filters are good enough, and the wider the skirt, the more pleasant sounding the audio is.

So while SWL reception was probably unusable most of the time on an SPR-4 around 1990, today they are wonderful.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

13819. Re: [DrakeRadio] CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 19:44:35 UTC
From: Richard Knoppow
Topic: 13816 Message: 13819

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 11:59 AM
Subject: Re: [DrakeRadio] CW side tone level adjustment

> Richard -
>
> How about the 'ANTI-VOX / SIDETONE' control on the right
> side?? :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA

Well, that works but I would like to leave the anti-vox
set at a correct level for SSB rather than having to change
it back and forth. It may be that in my particular set up
the anti-vox has to be set higher than usual.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13820. Re: Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 19:52:46 UTC
From: dohafisher
Topic: 13313 Message: 13820

Tnx Garey for the help, finally got back on the T4X, here's and update.
All the resistors were OK. I noticed you said failure to dip could be caused by a bad antenna match, or coax. Also when I was trying to tune up, when I wud switch to the T4X pwr meter, it was showing output, but none on my external pwr meter. I soldered a coax on the ^JB6 side on the antenna relay, and was able to tune up. I had abt 140 watts out, at 350ma current. Don't know if my relay is bad or just not activating.
I measured voltage on the V-10 side of the relay in SSB 268, in TUNE 275. I also measure the voltage on the other side of the relay SSB 275, TUNE 208. I then inserted a ammeter between V10 and the relay, in SSB 10.1ma, in TUNE 9.9ma.
Can I turn the T4X on it's side and key it to see if the relay is moving, or would that cause problems. How can I tell if the relay is actually activating when I key it? If the relay is bad, do you know where I might be able to get a replacement, and is it as bad to get out as it looks?

Thanks
Doyle
kg4urf

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Doyle -
>
> There is a very comprehensive tune up procedure in the manual for the
> T-4X. If you follow it, it will tune up fine.
>
> Essentially what you have to do is start with the LOAD control at 0.
> Set the PLATE control to about 4. Preset the RF TUNE control in the
> band indicated for where you have the BAND SWITCHset. Set theGAIN
> control to about 10 o'clock.
>
> Key the transmitter in TUNE, while watching the plate meter and adjust
> the RF TUNE to where the meter kicks up. It should peak in or very
> near the area marked onthe dial. Immediately adjust the PLATE control
> for MINIMUM on the meter. Unkey the transmitter. Wait a minute, then
> key it again, re peak the RF TUNE, and re-dip the PLATE. You can
> increase the LOAD control at this point, the meter will go up and
> again adjust the PLATE for MINIMUM. Keep going back and forth like
> this until increasing the LOADcontrol no longer increases the PLATE
> meter. This should be around 350 mA, and about 130W output on 40M if
> you have good PA tubes.
>
> The ONE THING to remember about all that above is the FIRST and LAST
> thing you do is 'dip' the PLATE control (adjust for minmum on the
> PLATE meter). If at any time the meter does NOT 'dip' when the PLATE
> control is adjusted, un-key the transmitter immediately and find out

> why. Typical causes for this are 'wrong antenna', 'no antenna', 'bad
> antenna coax', and like that. Do not key again until you find out
> what's wrong. It's ok to key quickly and adjust PLATE quickly when you
> think you've found the problem, but be ready un-key immediately if
> still no 'dip'.
>
> If you do this, your PA (6JB6) tubes will last for years. If you
> don't, they won't last out the week!!
>
> If you don't have a manual, get one. My CD for the T-4X transmitter
> and R-4A receiver has high resolution PDFs of the original manuals
> along with a lot of other stuff you'll find very handy if you work on
> your radios. It costs less than many charge for a single print of one
> manual.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> dohafisher wrote:
> > Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.
> >
> > Thanks
> > Doyle
> > KG$URF
> >
> >
> >
> >
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> >
> > Yahoo! Groups Links
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13821. Re: Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 19:54:49 UTC
From: dohafisher
Topic: 13313 Message: 13821

I almost forgot, how much are your CD's and where can I get them??

--- In DrakeRadio@yahoogroups.com, "dohafisher" <dhfisher@...> wrote:
>
> Tnx Garey for the help, finally got back on the T4X, here's and update.
> All the resistors were OK. I noticed you said failure to dip could be caused by a bad antenna match, or coax. Also when I was trying to tune up, when I wud switch to the T4X pwr meter, it was showing output, but none on my external pwr meter. I soldered a coax on the ^JB6 side on the antenna relay, and was able to tune up. I had abt 140 watts out, at 350ma current. Don't know if my relay is bad or just not activating.
> I measured voltage on the V-10 side of the relay in SSB 268, in TUNE 275. I also measure the voltage on the other side of the relay SSB 275, TUNE 208. I then inserted a ammeter between V10 and the relay, in SSB 10.1ma, in TUNE 9.9ma.
> Can I turn the T4X on it's side and key it to see if the relay is moving, or would that cause problems. How can I tell if the relay is actually activating when I key it? If the relay is bad, do you know where I might be able to get a replacement, and is it as bad to get out as it looks?
>
> Thanks
> Doyle
> kg4urf
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >
> > Doyle -
> >
> > There is a very comprehensive tune up procedure in the manual for the
> > T-4X. If you follow it, it will tune up fine.
> >
> > Essentially what you have to do is start with the LOAD control at 0.
> > Set the PLATE control to about 4. Preset the RF TUNE control in the
> > band indicated for where you have the BAND SWITCHset. Set theGAIN
> > control to about 10 o'clock.
> >
> > Key the transmitter in TUNE, while watching the plate meter and adjust
> > the RF TUNE to where the meter kicks up. It should peak in or very
> > near the area marked onthe dial. Immediately adjust the PLATE control
> > for MINIMUM on the meter. Unkey the transmitter. Wait a minute, then
> > key it again, re peak the RF TUNE, and re-dip the PLATE. You can
> > increase the LOAD control at this point, the meter will go up and
> > again adjust the PLATE for MINIMUM. Keep going back and forth like
> > this until increasing the LOADcontrol no longer increases the PLATE
> > meter. This should be around 350 mA, and about 130W output on 40M if

> > you have good PA tubes.
> >
> > The ONE THING to remember about all that above is the FIRST and LAST
> > thing you do is 'dip' the PLATE control (adjust for minmum on the
> > PLATE meter). If at any time the meter does NOT 'dip' when the PLATE
> > control is adjusted, un-key the transmitter immediately and find out
> > why. Typical causes for this are 'wrong antenna', 'no antenna', 'bad
> > antenna coax', and like that. Do not key again until you find out
> > what's wrong. It's ok to key quickly and adjust PLATE quickly when you
> > think you've found the problem, but be ready un-key immediately if
> > still no 'dip'.
> >
> > If you do this, your PA (6JB6) tubes will last for years. If you
> > don't, they won't last out the week!!
> >
> > If you don't have a manual, get one. My CD for the T-4X transmitter
> > and R-4A receiver has high resolution PDFs of the original manuals
> > along with a lot of other stuff you'll find very handy if you work on
> > your radios. It costs less than many charge for a single print of one
> > manual.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > dohafisher wrote:
> > > Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.
> > >
> > > Thanks
> > > Doyle
> > > KG$URF
> > >
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> > >
> > > Yahoo! Groups Links
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>

13822. Re: [DrakeRadio] CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 20:28:58 UTC
From: Garey Barrell
Topic: 13816 Message: 13822

Perhaps you need a more directional mic!! Or turn down the receiver
audio. Or move the mic from in front of the speaker!! Or stay on CW!!!!!

For CW I just leave the receiver in ON and listen to my real signal.
My keyer has a monitor, but my Vibroplex doesn't!

Geta TR-7....... :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, May 19, 2013 11:59 AM
> Subject: Re: [DrakeRadio] CW side tone level adjustment
>
>
>> Richard -
>>
>> How about the 'ANTI-VOX / SIDETONE' control on the right
>> side?? :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
> Well, that works but I would like to leave the anti-vox
> set at a correct level for SSB rather than having to change
> it back and forth. It may be that in my particular set up
> the anti-vox has to be set higher than usual.
>
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
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> ------------------------------------

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> Yahoo! Groups Links
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13823. Re: [DrakeRadio] Re: Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 20:56:02 UTC
From: Garey Barrell
Topic: 13313 Message: 13823

Doyle -

The relay has to close to key the transmitter. But you could have a bent or burned contact.

Let's make sure we're talking about the same things here before we go too far. You're saying that you were able to solder a coax on the PA side of the antenna relay and get a nominal, full output. Forgive me if I get too basic, but have you examined the wiring from the relay to the ANT connector onthe chassis? Is the connector in good condition? How about the connector(s) on the cable from the ANT connector to the wattmeter?? the attached page identifies the various relay contact sets and their function.

Your voltage readings are not quite clear to me either. The point of interest is Pin 6 of V10. You should see about 260 VDC or so in SSB, relay de-energized, and about 200 VDC in TUNE, with relay energized. In SSB, with the PTT closed, Pin 6 should again read about 200 VDC, and the relay is energized. You should be able to clearly hear the relay close when switching from SSB (no PTT, GAIN at minimum) to TUNE.

Yes, the relay IS a PTIA to replace. There is one very effective way to do it at<http://jessystems.com/R4B-T4XB.html>. Drake also offered a small pc board to mount a socket for the same relaythat is used in the later C-Line pieces, but they are no longer available. I have the information, and have considered making a few boards, but just another one of those projects.

I would suggest a close inspection of the relay itself, and special attention to the ANT switching contact set. Don't forget the cables mentioned, bad cable have bit more than a few of us!!

The CDs are available and described on my website at <www.k4oah.com>. Paypal to <k4oah@...> is fine, as are check or mo. Specify which one(s) you want.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

dohafisher wrote:
> Tnx Garey for the help, finally got back on the T4X, here's and update.
> All the resistors were OK. I noticed you said failure to dip could be caused by a bad antenna match, or coax. Also when I was trying to tune up, when I wud switch to the T4X pwr

meter, it was showing output, but none on my external pwr meter. I soldered a coax on the ^JB6 side on the antenna relay, and was able to tune up. I had abt 140 watts out, at 350ma current. Don't know if my relay is bad or just not activating.
> I measured voltage on the V-10 side of the relay in SSB 268, in TUNE 275. I also measure the voltage on the other side of the relay SSB 275, TUNE 208. I then inserted a ammeter between V10 and the relay, in SSB 10.1ma, in TUNE 9.9ma.
> Can I turn the T4X on it's side and key it to see if the relay is moving, or would that cause problems. How can I tell if the relay is actually activating when I key it? If the relay is bad, do you know where I might be able to get a replacement, and is it as bad to get out as it looks?
>
> Thanks
> Doyle
> kg4urf
>
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Doyle -
>>
>> There is a very comprehensive tune up procedure in the manual for the
>> T-4X. If you follow it, it will tune up fine.
>>
>> Essentially what you have to do is start with the LOAD control at 0.
>> Set the PLATE control to about 4. Preset the RF TUNE control in the
>> band indicated for where you have the BAND SWITCHset. Set theGAIN
>> control to about 10 o'clock.
>>
>> Key the transmitter in TUNE, while watching the plate meter and adjust
>> the RF TUNE to where the meter kicks up. It should peak in or very
>> near the area marked onthe dial. Immediately adjust the PLATE control
>> for MINIMUM on the meter. Unkey the transmitter. Wait a minute, then
>> key it again, re peak the RF TUNE, and re-dip the PLATE. You can
>> increase the LOAD control at this point, the meter will go up and
>> again adjust the PLATE for MINIMUM. Keep going back and forth like
>> this until increasing the LOADcontrol no longer increases the PLATE
>> meter. This should be around 350 mA, and about 130W output on 40M if
>> you have good PA tubes.
>>
>> The ONE THING to remember about all that above is the FIRST and LAST
>> thing you do is 'dip' the PLATE control (adjust for minmum on the
>> PLATE meter). If at any time the meter does NOT 'dip' when the PLATE
>> control is adjusted, un-key the transmitter immediately and find out
>> why. Typical causes for this are 'wrong antenna', 'no antenna', 'bad
>> antenna coax', and like that. Do not key again until you find out
>> what's wrong. It's ok to key quickly and adjust PLATE quickly when you
>> think you've found the problem, but be ready un-key immediately if
>> still no 'dip'.
>>
>> If you do this, your PA (6JB6) tubes will last for years. If you
>> don't, they won't last out the week!!

>>
>> If you don't have a manual, get one. My CD for the T-4X transmitter
>> and R-4A receiver has high resolution PDFs of the original manuals
>> along with a lot of other stuff you'll find very handy if you work on
>> your radios. It costs less than many charge for a single print of one
>> manual.
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>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> dohafisher wrote:
>>> Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.
>>>
>>> Thanks
>>> Doyle
>>> KG$URF
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[Non-text portions of this message have been removed]

13824. R-4B mute problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 21:06:56 UTC
From: mammolistefano
Topic: 13824 Message: 13824

Hi all

My R-4B is started to have some mute problem, when i trasmit with his T-4XB twin it does not mute well, and while trasmitting I can hear my voice low on the speaker mixed with some ac, if I reduce the af gain it disappears, I first subtituted the 8 microfarad electrolitic capacitor on the bias, but nothing, i found that if I switch on the avc off position the problem disappears, the bias voltage is correct on TP2.
Any suggestions

73

stefano IK5PWL/KJ4FBB

13825. Re: [DrakeRadio] R-4B mute problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 21:22:38 UTC
From: Mike
Topic: 13824 Message: 13825

Are you sure it's a mute issue?

Could be as simple as rf getting into the audio/power supply lines.

Mike wb8vge

Sent from my iPhone

On May 19, 2013, at 5:06 PM, "mammolistefano" <ik5pwl@...> wrote:

> Hi all
>
> My R-4B is started to have some mute problem, when i trasmit with his T-4XB twin it does not mute well, and while trasmitting I can hear my voice low on the speaker mixed with some ac, if I reduce the af gain it disappears, I first subtituted the 8 microfarad electrolitic capacitor on the bias, but nothing, i found that if I switch on the avc off position the problem disappears, the bias voltage is correct on TP2.
> Any suggestions
>
> 73
>
> stefano IK5PWL/KJ4FBB
>
>

[Non-text portions of this message have been removed]

13826. Re: [DrakeRadio] R-4B mute problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 21:30:51 UTC
From: Garey Barrell
Topic: 13824 Message: 13826

Stefano -

Several possible problems.

First - Is the FUNCTION switch on the receiver in the EXT MUTE or NB position?? If it is in the ON position it will NOT mute.

The MUTE functions my 'unshorting' the MUTE jack on the receiver. Grounding this jack 'unmutes' the receiver.

1. Unplug the MUTE cable at the receiver end and see if it's completely muted. If it IS ...
Plug it back in and unplug the transmitter end. IF it's still muted when you unplug the transmitter end, the problem is in the transmitter.

2. If it is NOT muted with the cable unplugged at the R-4B end, the problem is in the receiver.

3. A bad (shorted/leaky) cable will unmute the receiver if plugged in ONLY at the receiver end.

4. About the only problem in the transmitter is a severely bent or broken relay contact.

5. If in the receiver, either a shorted wire or slight possibility of a leaky C205.

Voltage at TP2 should go to about -35 VDC when receiver is MUTEDand S-Meter should be at ~full scale.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

mammolistefano wrote:
> Hi all
>
> My R-4B is started to have some mute problem, when i trasmit with his T-4XB twin it does not mute well, and while trasmitting I can hear my voice low on the speaker mixed with some ac, if I reduce the af gain it disappears, I first subtituted the 8 microfarad electrolitic capacitor on the bias, but nothing, i found that if I switch on the avc off position the problem disappears, the bias voltage is correct on TP2.
> Any suggestions
>
> 73

>
> stefano IK5PWL/KJ4FBB
>
>
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13827. Re: [DrakeRadio] CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 23:10:38 UTC
From: Steve Wedge
Topic: 13816 Message: 13827

ANTI-VOX / SIDETONE on the right side of the cabinet, towards the rear.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Sunday, May 19, 2013 2:41 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] CW side tone level adjustment

The side tone from my T4XB is pretty loud. Is there any
way to adjust the level? Some component change maybe.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13828. Another "D'oh!" moment...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-19 23:20:20 UTC
From: Steve Wedge
Topic: 13828 Message: 13828

Got this R-4B back together and gave her the ol' smoke test. Nothing smoked (always a good sign) but the S-meter was stuck about mid-scale, and varying the RF GAIN and the various AGC, S-METER ZERO and receiver gain did diddley. I could hear the calibrator and background noise. Hmmm. That's strange.

No voltages at all at the RF GAIN pot. In fact, lots of 0V readings all over the place. Ruh-roh. Checked the power supply and there was no -80 bias supply. Ah - Eureka, as they said in the Grecian language. Turned off the rig and ohmed the -80 supply to GND.

Shorted.

Must be a bad diode. As I tilted the board on which the diode and capacitor are located, I saw something shiny and round roll out from underneath. There was a solder blob shorting the diode to the chassis.

Moral of the story: keep track of your de-soldering! I had replaced the capacitor with a new one and apparently the solder-sucker's vibration shook the molten solder off the board and deposited it on the chassis, where it rolled to just the perfect spot!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13829. Re: [DrakeRadio] CW side tone level adjustment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 01:52:02 UTC
From: Richard Knoppow
Topic: 13816 Message: 13829

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 1:28 PM
Subject: Re: [DrakeRadio] CW side tone level adjustment

> Perhaps you need a more directional mic!! Or turn down
> the receiver
> audio. Or move the mic from in front of the speaker!! Or
> stay on CW!!!!!
>
> For CW I just leave the receiver in ON and listen to my
> real signal.
> My keyer has a monitor, but my Vibroplex doesn't!
>
> Geta TR-7....... :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA

I am using an Electro-Voice 664 but its too close to
the speaker. The MS-4 is on a shelf over the RX and TX.
This is not a major problem but I thought there might be
some simple way to do it. I am going to start working CW
again. Haven't for years and its taken me a while to get my
confidence up. After listening around I think I am actually
ahead of the game. The twins seem to make a very good CW
rig.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13830. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 17:49:23 UTC
From: Steve Wedge
Topic: 13810 Message: 13830

Half a turn is quite a bit, so I'm not surprised it was sloppy.

You should be able to turn the knob with your index finger when the tension is right.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 19, 2013, at 2:39 PM, "Richard Knoppow" <1oldlens1@...om.com> wrote:

>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, May 19, 2013 7:10 AM
> Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B
>
> > Richard -
> >
> > Should be a 'cup' Allen head setscrew at the back end.
> > There's a LOT
> > of room, so I don't think the screw fell out. Reach in
> > with your
> > Xcelite!! Sorry I don't recall which size. Tighten just
> > enoughto
> > take out any side play.
> >
> William Houghton was right, its 3/32. I used an
> extra-long L wrench with a ball tip. Took maybe half a turn
> to make it solid. Thank you all.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

[Non-text portions of this message have been removed]

13831. Re: [DrakeRadio] Re: Tuning the T4X

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 17:53:25 UTC
From: Steve Wedge
Topic: 13313 Message: 13831

Yes, it's a pain to change the relays on the pre-C transmitters. You may be able to clean the contacts - carefully! - with contact cleaner and a crisp dollar bill between the contacts. Be REALLY careful!

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 19, 2013, at 3:52 PM, "dohafisher" <dhfisher@...> wrote:

> Tnx Garey for the help, finally got back on the T4X, here's and update.
> All the resistors were OK. I noticed you said failure to dip could be caused by a bad antenna match, or coax. Also when I was trying to tune up, when I wud switch to the T4X pwr meter, it was showing output, but none on my external pwr meter. I soldered a coax on the ^JB6 side on the antenna relay, and was able to tune up. I had abt 140 watts out, at 350ma current. Don't know if my relay is bad or just not activating.
> I measured voltage on the V-10 side of the relay in SSB 268, in TUNE 275. I also measure the voltage on the other side of the relay SSB 275, TUNE 208. I then inserted a ammeter between V10 and the relay, in SSB 10.1ma, in TUNE 9.9ma.
> Can I turn the T4X on it's side and key it to see if the relay is moving, or would that cause problems. How can I tell if the relay is actually activating when I key it? If the relay is bad, do you know where I might be able to get a replacement, and is it as bad to get out as it looks?
>
> Thanks
> Doyle
> kg4urf
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
> >
> > Doyle -
> >
> > There is a very comprehensive tune up procedure in the manual for the
> > T-4X. If you follow it, it will tune up fine.
> >
> > Essentially what you have to do is start with the LOAD control at 0.
> > Set the PLATE control to about 4. Preset the RF TUNE control in the
> > band indicated for where you have the BAND SWITCHset. Set theGAIN
> > control to about 10 o'clock.
> >
> > Key the transmitter in TUNE, while watching the plate meter and adjust
> > the RF TUNE to where the meter kicks up. It should peak in or very
> > near the area marked onthe dial. Immediately adjust the PLATE control
> > for MINIMUM on the meter. Unkey the transmitter. Wait a minute, then
> > key it again, re peak the RF TUNE, and re-dip the PLATE. You can
> > increase the LOAD control at this point, the meter will go up and
> > again adjust the PLATE for MINIMUM. Keep going back and forth like

> > this until increasing the LOADcontrol no longer increases the PLATE
> > meter. This should be around 350 mA, and about 130W output on 40M if
> > you have good PA tubes.
> >
> > The ONE THING to remember about all that above is the FIRST and LAST
> > thing you do is 'dip' the PLATE control (adjust for minmum on the
> > PLATE meter). If at any time the meter does NOT 'dip' when the PLATE
> > control is adjusted, un-key the transmitter immediately and find out
> > why. Typical causes for this are 'wrong antenna', 'no antenna', 'bad
> > antenna coax', and like that. Do not key again until you find out
> > what's wrong. It's ok to key quickly and adjust PLATE quickly when you
> > think you've found the problem, but be ready un-key immediately if
> > still no 'dip'.
> >
> > If you do this, your PA (6JB6) tubes will last for years. If you
> > don't, they won't last out the week!!
> >
> > If you don't have a manual, get one. My CD for the T-4X transmitter
> > and R-4A receiver has high resolution PDFs of the original manuals
> > along with a lot of other stuff you'll find very handy if you work on
> > your radios. It costs less than many charge for a single print of one
> > manual.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > dohafisher wrote:
> > > Just got a T4X replaced the electrolyics and paper caps, new power supply kit from Paul Kraemer. My question, is there a quick and easy tune up prodecure? I haven't found where to preset the plate. I've went thru the prodecure in the manual but although I'm getting indications on the Drake meter, I have no output on my power meter. I think I'm just not getting it tuned up correctly. Any help or tips would be appreciated.
> > >
> > > Thanks
> > > Doyle
> > > KG$URF
> > >
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> > > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13832. my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 18:52:11 UTC
From: William Houghton
Topic: 13832 Message: 13832

Hi Garey,

I measured the output on the ends of the various bands into a dummy load. I'm getting 150W to 160W at some ends. In all cases there is a noticable drop from one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at 4.0MHz. I'll have a better feel for it after I align it.

The cathode resistors are all about 17% high at 17.5 ohms. Not sure how much that affects the output power.

Now to try to bend the PTO's brass tuning rod straight unless someone has a working TR-4 PTO available -hihi.

73,

Bill

[Non-text portions of this message have been removed]

13833. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 19:32:02 UTC
From: Garey Barrell
Topic: 13832 Message: 13833

Bill -

OK, that's not bad. Fully aligned with new PA tubes, you should see
about 200W on 80-20M, 175W on 15M and 150W on 10M.

The Cathode resistors eat into your power somewhat. They need to be
close to 15 ohms, ideally within 5% of each other. They're there to
equalize the current through the three tubes. If the voltage across
one resistor goes up, the Cathode voltage goes up, which makes the
Grid slightly more negative, which reduces the current throughthat tube.

You'll probably be fine once you get the alignment done. Good luck!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> I measured the output on the ends of the various bands into a dummy load. I'm
> getting 150W to 160W at some ends. In all cases there is a noticable drop from
> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
> 4.0MHz. I'll have a better feel for it after I align it.
>
> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how much
> that affects the output power.
>
> Now to try to bend the PTO's brass tuning rod straight unless someone has a
> working TR-4 PTO available -hihi.
>
> 73,
>
> Bill
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13834. Re-initializing the PBT assembly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 22:46:30 UTC
From: Steve Wedge
Topic: 13834 Message: 13834

I've done a Very Bad Thing.

While tuning the PBT slugs, there was one that didn't seem to be peaking, so I kept turning it. Things got worse. I tried returning it and re-peaking everything.

I think you know the path I've gone down: one that a good tech isn't supposed to take. I will allow that this R-4B had been fiddled with before I got it. I had almost finished doing the alignment when this happened.

The slug rack and the cam were cleaned and re-greased.

How did they initially set up this thing at the factory? Am I correct in assuming that the distances from the plate to the slugs does not necessarily have to be equal when it's close? I say this because when I tried setting them up this way, the threaded ends were not equal at the rear plate where the holes are. I will assume I need to start with the rear "threads" nearly equal relative to the rear plate.

The schematic depicts the selector as variable capacitance. It appears I can start peaking the slugs in the 2.4 position, I get a little better in 1.2 and by 0.4 it all falls apart.

It also appears that I can't get the lower-left slug to turn out - which is what started the trouble to begin with.

Any suggestions welcome.

73,

Has anyone else gotten in this deep?

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13835. Re: TR7 band switching problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 22:58:19 UTC
From: k2gtm1
Topic: 13729 Message: 13835

Thanks Garey and Jim!

Jim - I've gone through and re-cleaned the Molex pins and sockets on the translator board with no joy. Used straight Deoxit and the contacts. I also cleaned up the bandswitch contacts as it was a bit intermittent - they were gross! A little Deoxit on a Q-Tip works miracles.

I'm aware of the repro extender boards, but I can't afford to buy a set at the moment - Need to sell more junk on eBay! Lol...

I checked all of the tantalums on the translator board and they test fine. I think I'm just going to order the four ICs in that circuit and all of the tantalum and electrolytic caps in the radio and get to work. I've had run-ins with shorted and exploded tantalums, so I'd rather know that there are new ones in the radio - especially since I'd like to use the radio on a daily basis.

Garey - Thanks for the file! I've come up with a similar sheet while troubleshooting this problem. It seems that the DR7 is sending the right bits to the translator, so there must be a stuck bit on one of those chips.

In the mean time, I've been working on cleaning out the gummy grease on the PTO ball bearings. Is there an easy way to do this without taking the PTO apart? I have the PTO out of the radio already.

Thanks again for your help!

73,
-Greg K2GTM

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Greg -
>
> Welcome to the madness!! :-)
>
> I think you may be beyond this, but I find the attached handy when
> troubleshooting in this area.....
>
> Keep us posted!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

> k2gtm1 wrote:
> > Hello all!
> >
> > I've been dreaming about owning a TR7 for decades, and I finally got an excellent-condition one with all the bells and whistles (PS7, NB7, DR7, AUX7, FA7, SL-300, SL-500, SL-1800). Best part, the price was very reasonable! :)
> >
> > Unfortunately, it has/had some issues I'm working on:
> > - There was no speaker audio. Caused by a bad LM380 audio amp chip.
> > - Intermittents. I cleaned all of the Molex pins and re-soldered them to the boards.
> > - A strange issue with band selection: I haven't been able to figure this out yet and I'm hoping someone can help...
> >
> > The radio will not tune above the 23.5 MHz segment. Also, the segments are out-of order when going through them using the DR7 UP/DOWN buttons. Here are the frequencies I get when the PTO dial is set to 0 00 for each band switch position and DR7 step:
> >
> > BAND SWITCH // # of STEPS // FREQUENCIES
> > 1.5 - 2 // 1 // 1.5
> > 2 - 3 // 2 // 2, 2.5
> > 3 - 4.5 // 3 // 3, *2.5, 3
> > 4.5 - 7 // 5 // 3.5, 4, 4.5, 5, 5.5
> > 7 - 10 // 6 // 6, 6.5, 7, *6.5, 7, 7.5
> > 10 - 15 // 10 // 8, 8.5, 9, 9.5, 10, 10.5, 11, *10.5, 11, 11.5
> > 15 - 22 // 14 // 12, 12.5, 13, 13.5, 14, 14.5, 15, *14.5, 15, 15.5, 16, 16.5, 17, 17.5
> > 22 - 30 // 16 // 18, 18.5, 19, *18.5, 19, 19.5, 20, 20.5, 21, 21.5, 22, 22.5, 23, *22.5, 23, 23.5
> >
> > (* denotes where "step-backs" occur, even when pressing UP)
> >
> > Hopefully this makes sense!
> >
> > Here's what I've figured out so far:
> > - The DR7 UP/DOWN buttons work correctly and the PROM chip correctly prevents the user from going too high or too low within the band selected.
> > - The number of 500 kHz steps selectable within each band is correct.
> > - U9005(LSD) and U9006(MSD) on DR7 are loading the correct values into the translator board (i.e. "83" for 1.5 MHz and "27" for 29.5 MHz).
> > - The radio transmits and receives properly on the displayed frequencies. (The radio is trying to get to the correct 500 kHz segments, but can't.)
> >
> > SO, I've gone as far as I can considering I don't have any extender boards to test the translator board (and especially the divide-by-n circuit) directly. I'm guessing it must be one of the ICs in that circuit that isn't working correctly. I could just replace all four of the ICs, but I'd rather know exactly what the bad part is.
> >
> > Does anyone have any idea what would be causing this mess?? Also, would anyone be willing to lend me a working translator board so I can try it in my TR7? Your help will be GREATLY appreciated!
> >

> > I'm in love with this radio - even if it doesn't work right!! :)
> >
> > Thanks and 73,
> > -Greg K2GTM
> >
>
>
>
> [Non-text portions of this message have been removed]
>

13836. Re: [DrakeRadio] Re-initializing the PBT assembly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 23:31:23 UTC
From: William Houghton
Topic: 13834 Message: 13836

Are you talking about adjusting the height of the slugs on the transformers in the PBT rack?

Sounds like "you's in a heap a' trouble, now" Steve.

You need the advice of Drake Guru Garey.

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, May 20, 2013 3:46:32 PM
Subject: [DrakeRadio] Re-initializing the PBT assembly

I've done a Very Bad Thing.

While tuning the PBT slugs, there was one that didn't seem to be peaking, so I kept turning it. Things got worse. I tried returning it and re-peaking everything.

I think you know the path I've gone down: one that a good tech isn't supposed to take. I will allow that this R-4B had been fiddled with before I got it. I had almost finished doing the alignment when this happened.

The slug rack and the cam were cleaned and re-greased.

How did they initially set up this thing at the factory? Am I correct in assuming that the distances from the plate to the slugs does not necessarily have to be equal when it's close? I say this because when I tried setting them up this way, the threaded ends were not equal at the rear plate where the holes are. I will assume I need to start with the rear "threads" nearly equal relative to the rear plate.

The schematic depicts the selector as variable capacitance. It appears I can start peaking the slugs in the 2.4 position, I get a little better in 1.2 and by 0.4 it all falls apart.

It also appears that I can't get the lower-left slug to turn out - which is what started the trouble to begin with.

Any suggestions welcome.

73,

Has anyone else gotten in this deep?

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13837. Re: [DrakeRadio] Re-initializing the PBT assembly

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-20 23:51:45 UTC
From: Steve Wedge
Topic: 13834 Message: 13837

Don't I know it, Bill.

It appears that the crux of the problem is that the bottom-left (when looking from the back) slug will not move in or out. Adjusting the upper-left slug does very little.

I tried dialing-in all of the slugs at the 1.2 setting and was able to peak the two on the right. I was starting to think that maybe they're switched in series, but apparently, it's just the coupling between them that is changed. The schematic isn't really helpful. I haven't looked on the CD yet, so that's my next step.

If I adjust the centre screw so that I have the same sound at 9 o'clock and 3 o'clock, with the selectivity at 0.4, I was able to peak the two on the right. I'm starting to think the switch or a capacitor might have gone bad.

Signal attenuation really begins at the 1.2 setting and is downright awful at .4.

I'm calling it a night with this. Anyone got a PBT assembly?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: William Houghton
Sent: Monday, May 20, 2013 7:31 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re-initializing the PBT assembly

Are you talking about adjusting the height of the slugs on the transformers in the PBT rack?

Sounds like "you's in a heap a' trouble, now" Steve.

You need the advice of Drake Guru Garey.

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, May 20, 2013 3:46:32 PM
Subject: [DrakeRadio] Re-initializing the PBT assembly

I've done a Very Bad Thing.

While tuning the PBT slugs, there was one that didn't seem to be peaking, so I kept turning it. Things got worse. I tried returning it and re-peaking everything.

I think you know the path I've gone down: one that a good tech isn't supposed to take. I will allow that this R-4B had been fiddled with before I got it. I had almost finished doing the alignment when this happened.

The slug rack and the cam were cleaned and re-greased.

How did they initially set up this thing at the factory? Am I correct in assuming that the distances from the plate to the slugs does not necessarily have to be equal when it's close? I say this because when I tried setting them up this way, the threaded ends were not equal at the rear plate where the holes are. I will assume I need to start with the rear "threads" nearly equal relative to the rear plate.

The schematic depicts the selector as variable capacitance. It appears I can start peaking the slugs in the 2.4 position, I get a little better in 1.2 and by 0.4 it all falls apart.

It also appears that I can't get the lower-left slug to turn out - which is what started the trouble to begin with.

Any suggestions welcome.

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Has anyone else gotten in this deep?

73,

Steve Wedge, W1ES/4

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13838. PBT Issue resolved - I think...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 00:31:14 UTC
From: Steve Wedge
Topic: 13838 Message: 13838

I took the R-4B's slug rack out again and noticed the one that wouldn't adjust was turning the plastic sleeve in the metal bracket. I carefully held the sleeve with some needle-nose pliers and turned the slug.

Success!

Put everything back and it's all working a lot better - except it seems to me that the upper-left coil doesn't peak as sharply as the others. Still thinking there's something else not right here...

Time to really call it a night. Really.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13839. Re: [DrakeRadio] PBT Issue resolved - I think...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 01:33:25 UTC
From: Garey Barrell
Topic: 13838 Message: 13839

Steve -

You're making progress! Procedure on the CD.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I took the R-4B's slug rack out again and noticed the one that wouldn't adjust was turning the plastic sleeve in the metal bracket. I carefully held the sleeve with some needle-nose pliers and turned the slug.
>
> Success!
>
> Put everything back and it's all working a lot better - except it seems to me that the upper-left coil doesn't peak as sharply as the others. Still thinking there's something else not right here...
>
> Time to really call it a night. Really.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
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13840. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 06:32:15 UTC
From: William Houghton
Topic: 13832 Message: 13840

Hi Garey,

After alignment I now get:

80m: 160W at both ends
40m: 140W to 160W
20m: 150W to 160W
15m: 120W to 130W
10m: 130W to 140W

with the somewhat high cathode resistors giving slightly more negative feedback
than intended. Not knowing the age of the finals I am pleased with these
results.

73,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, May 20, 2013 12:32:11 PM
Subject: Re: [DrakeRadio] my latest TR-4

Bill -

OK, that's not bad. Fully aligned with new PA tubes, you should see
about 200W on 80-20M, 175W on 15M and 150W on 10M.

The Cathode resistors eat into your power somewhat. They need to be
close to 15 ohms, ideally within 5% of each other. They're there to
equalize the current through the three tubes. If the voltage across
one resistor goes up, the Cathode voltage goes up, which makes the
Grid slightly more negative, which reduces the current throughthat tube.

You'll probably be fine once you get the alignment done. Good luck!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> I measured the output on the ends of the various bands into a dummy load. I'm

> getting 150W to 160W at some ends. In all cases there is a noticable drop from
> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
> 4.0MHz. I'll have a better feel for it after I align it.
>
> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how much
> that affects the output power.
>
> Now to try to bend the PTO's brass tuning rod straight unless someone has a
> working TR-4 PTO available -hihi.
>
> 73,
>
> Bill
>
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13841. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 06:37:23 UTC
From: Richard Knoppow
Topic: 13810 Message: 13841

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 11:39 AM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

I was just going over the stuff in Garey's B line disk.
I found the information I was looking for in two places.
Likely its in others too. Shoulda looked!!

13842. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 07:01:34 UTC
From: William Houghton
Topic: 13810 Message: 13842

Richard, I always had the impression that you already knew most of this stuff. I don't mean that in a negative way.

From: Richard Knoppow <1oldlens1@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, May 20, 2013 11:38:11 PM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 11:39 AM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

I was just going over the stuff in Garey's B line disk.
I found the information I was looking for in two places.
Likely its in others too. Shoulda looked!!

[Non-text portions of this message have been removed]

13843. Re: [DrakeRadio] PBT Issue resolved - I think...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 11:41:55 UTC
From: Steve Wedge
Topic: 13838 Message: 13843

Yeah, I was getting tired last night and did find a procedure on the CD that differs from what's in the manual. The CD procedure looks like it's a bit simpler.

I think this one was "out" when I got it - probably due to a PO trying the same things I did but being afraid to take apart the slug rack. As soon as I got the rack out, I could immediately see what the problem was. Once the slug was freed relative to the plastic sleeve, it turned freely.

I still have a little concern about that top-left slug. Adjusting it just doesn't seem to do very much: it's VERY broad, which suggests to me that the Q of that one part of the circuit is low. I'm hoping it's not a bad capacitor, as these caps all seem to have color codes on them - suggesting they were matched. Do you have any insight as to how they assembled and tested these assemblies?

Right now, I am listening to A35JP on 20 CW with the 400 Hz filter and he's quite hearable; the selectivity is okay. Sounds about as strong as on my K3 (he is pretty weak and is a pretty good test for a weak signal - and, yes, I worked him...).

Aside from this problem, the calibrator and the hum, this receiver was okay and now is working a lot better. The calibrator doesn't seem to be as strong as on my other B but it's useable. I did abuse that coupling cap while working on it (it's also the "jumper"). All the hum is gone after doing the can cap yesterday.

Ah, well - I'll have more time to play with this later this evening. I'll try the CD procedure then.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, May 20, 2013 9:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] PBT Issue resolved - I think...

Steve -

You're making progress! Procedure on the CD.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I took the R-4B's slug rack out again and noticed the one that wouldn't adjust was turning the plastic sleeve in the metal bracket. I carefully held the sleeve with some needle-nose pliers and turned the slug.
>
> Success!
>
> Put everything back and it's all working a lot better - except it seems to me that the upper-left coil doesn't peak as sharply as the others. Still thinking there's something else not right here...
>
> Time to really call it a night. Really.
>
> 73,
>
> Steve Wedge, W1ES/4
>
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13844. Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 11:44:01 UTC
From: Steve Wedge
Topic: 13810 Message: 13844

Yeah, Richard, I'm sometimes amazed at what's on there - usually when I think a problem is fairly esoteric. I should look on the CD first.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Tuesday, May 21, 2013 2:37 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 19, 2013 11:39 AM
Subject: Re: [DrakeRadio] Wobbly tuning knob and dial on R4B

I was just going over the stuff in Garey's B line disk.
I found the information I was looking for in two places.
Likely its in others too. Shoulda looked!!

[Non-text portions of this message have been removed]

13845. Drake Forum at 2013 Hamvention

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 13:52:50 UTC
From: k9sqg
Topic: 13845 Message: 13845

Fellow Drake Enthusiasts,

The Drake Forum at Hamvention 2013 was attended by more than 167 hams interested in Drake equipment. Interesting presentations were made by Ron Baker WB4HFN, and Rob Sherwood NC0B. Free pens with the Drake logo and free door prizes including a dual band HT were taken home by many of those in attendance. If you were not able to attend, or if you would like to remember what you saw while there, please visit the VIMEO website and enter the title below into the search box:

Hamvention 2013 Drake Forum

Comments, questions, constructive criticism, ideas, suggestions, etc. are welcomed and I would enjoy hearing from you.

73,

Evan, K9SQG
K9SQG@...

13846. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 13:55:31 UTC
From: Garey Barrell
Topic: 13832 Message: 13846

Bill -

That's typical of a TR-4 with 'used' finals. Output power of 'new' finals reaches these levels in a year or so, depending upon brand, etc. ..... However, once they get to this level they tend to last a LOT longer with reasonable care.

The relative values of those cathode resistors is more important than the absolute value. If you're tired of working on it, add some Ohmite OX ceramic composition resistors, or if you can find 'good' 2W carbon comps, and have them on hand for the next time you're in the mood!! :-) Metal or carbon 'film' resistors are not a good choice, as they don't care for current surges like these see.

Congratulations!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> After alignment I now get:
>
> 80m: 160W at both ends
> 40m: 140W to 160W
> 20m: 150W to 160W
> 15m: 120W to 130W
> 10m: 130W to 140W
>
> with the somewhat high cathode resistors giving slightly more negative feedback
> than intended. Not knowing the age of the finals I am pleased with these
> results.
>
>
> 73,
>
> Bill
>
>
>
>

> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Mon, May 20, 2013 12:32:11 PM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Bill -
>
> OK, that's not bad. Fully aligned with new PA tubes, you should see
> about 200W on 80-20M, 175W on 15M and 150W on 10M.
>
> The Cathode resistors eat into your power somewhat. They need to be
> close to 15 ohms, ideally within 5% of each other. They're there to
> equalize the current through the three tubes. If the voltage across
> one resistor goes up, the Cathode voltage goes up, which makes the
> Grid slightly more negative, which reduces the current throughthat tube.
>
> You'll probably be fine once you get the alignment done. Good luck!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>
>> 73,
>>
>> Bill
>>
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13847. Typical Tuning Settings For a High-Number T-4XC?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 15:52:54 UTC
From: marrer_enterprises
Topic: 13847 Message: 13847

OK, so I'm new at this, and just learning how to tune a tube transmitter. Have been following the steps in the manual and I think I have it right. However, just looking for some confirmation that things are not out of whack and I might mess up the rig.

I also realize that every system is different, so there are no hard and fast "correct" values. However, after tuning for both 20m and 40m, I ended up with a Plate setting of around 7-8 and a Load setting of around 3.

Does that sound about in the ballpark for what others that own this model transmitter end up with when tuning?

[Non-text portions of this message have been removed]

13848. Re: [DrakeRadio] Typical Tuning Settings For a High-Number T-4XC?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 16:06:26 UTC
From: Garey Barrell
Topic: 13847 Message: 13848

Those are reasonable numbers. The only way to get 'comparable'
numbers is if you load into a good dummy load. Otherwise, variations
in antennas candisrupt 'correct' numbers.

TUNE mode, dip PLATE control, increase LOAD control, alternately,
until increasing LOAD control no longer results in an increase in
output power. The GAIN control should increase power smoothly, and
'top out' around 4-5. This is the ALC taking control. CW operation
may require advancing the GAIN control, sometimes considerably, for
maximum output. Key factor is _keep the PLATE control dipped for
minimum current_. Should be the first and last adjustment made.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

marrer_enterprises wrote:
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> are not out of whack and I might mess up the rig.
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> fast "correct" values. However, after tuning for both 20m and 40m, I
> ended up with a Plate setting of around 7-8 and a Load setting of around
> 3.
>
> Does that sound about in the ballpark for what others that own this
> model transmitter end up with when tuning?
>
>

13849. R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 17:29:41 UTC
From: Steve Wedge
Topic: 13849 Message: 13849

I've arrived at the conclusion that the S-meter in this R-4B has got some mechanical problems. Right now, with the receiver off, the meter is reading S-2 and it hardly indicates anything at all unless there's a super-strong signal present.

I'm tempted to work on it but I'd rather buy one first so if I mess with it and screw it up, I don't have a perfectly good receiver with a junk meter in it.

Anyone got one for sale?

Alternatively, I can't remember if this has been brought up before or not, but has anyone found if the transmitter meter is the same movement - and, if so, how hard is it to get the cover off so I can swap the scales?

I know Garey has mentioned that these meters were super-cheap when Drake bought them, so I know I'm not dealing with something that's likely repairable...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13850. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 17:44:23 UTC
From: Garey Barrell
Topic: 13849 Message: 13850

Steve -

The good news is that the S-Meters are all the same, from the 2-B through the R-4C.

The not so good news is that the T-4X meters seem to be of two types. One sort is easy to open, the other is impossible! Also, the T-4X and early T-4XB meterhas a 0-400 mA scale, later B's and C's have a 0-500 mA scale. Both movements are the same, 0-3 mA fs.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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13851. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 18:12:01 UTC
From: Steve Wedge
Topic: 13849 Message: 13851

I thought so, as it would make sense from a production standpoint. (Then I start thinking about those setscrew-less knobs and do a facepalm...)

I have a meter from a T-4XB, so if I can get that case open, I'm sitting pretty...

Thanks,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, May 21, 2013 1:44 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

Steve -

The good news is that the S-Meters are all the same, from the 2-B
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13852. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 22:37:43 UTC
From: Steve Wedge
Topic: 13849 Message: 13852

I quickly hooked up the T-4XB meter I have and it's definitely behaving better than the meter that's in the R-4B.

First strategy will be to carefully pull apart the R-4B meter, if I can. If it won't come apart, I'll try taking apart the T-4XB meter. If I can get that one apart (and it looks like it will), I'll risk cracking the R-4B meter to do a scale transplant.

Thanks for the advice, Garey. I sorta thought they had the same guts, but it doesn't hurt to ask...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

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From: Steve Wedge
Sent: Tuesday, May 21, 2013 2:12 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

I thought so, as it would make sense from a production standpoint. (Then I start thinking about those setscrew-less knobs and do a facepalm...)

I have a meter from a T-4XB, so if I can get that case open, I'm sitting pretty...

Thanks,

Steve Wedge, W1ES/4

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From: Garey Barrell
Sent: Tuesday, May 21, 2013 1:44 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

Steve -

The good news is that the S-Meters are all the same, from the 2-B
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The not so good news is that the T-4X meters seem to be of two types.
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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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13853. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-21 22:49:33 UTC
From: Doug
Topic: 13849 Message: 13853

Steve,

Are your meters like the 4 line that have two screws that go though the plastic case? If so they are easy to take apart. You have to be very careful with the enamel wire loops that come out toward the meter front. If you don't know they're there they're hard to see.

Doug - N9XTF

Sent from my iPhone

On May 21, 2013, at 18:37, "Steve Wedge" <w1es1982@...m> wrote:

> I quickly hooked up the T-4XB meter I have and it's definitely behaving better than the meter that's in the R-4B.
>
> First strategy will be to carefully pull apart the R-4B meter, if I can. If it won't come apart, I'll try taking apart the T-4XB meter. If I can get that one apart (and it looks like it will), I'll risk cracking the R-4B meter to do a scale transplant.
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> Thanks for the advice, Garey. I sorta thought they had the same guts, but it doesn't hurt to ask...
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> Steve Wedge, W1ES/4
>
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>
> From: Steve Wedge
> Sent: Tuesday, May 21, 2013 2:12 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
>
> I thought so, as it would make sense from a production standpoint. (Then I start thinking about those setscrew-less knobs and do a facepalm...)
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> From: Garey Barrell
> Sent: Tuesday, May 21, 2013 1:44 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
>
> Steve -
>
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13854. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 00:38:18 UTC
From: Steve Wedge
Topic: 13849 Message: 13854

Swapped scales and both meters are still intact. The sluggish movement will probably be okay on a transmitter someday, should I need it.

Losing 2 - 3 S units with the 400 Hz filter, so something's still not right there.

Has anyone diagrammed which of the parts on the BPF board go with which coils? I'm still suspecting a bad part associated with the top-left coil (as viewed from the rear).

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

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From: Steve Wedge
Sent: Tuesday, May 21, 2013 6:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

I quickly hooked up the T-4XB meter I have and it's definitely behaving better than the meter that's in the R-4B.

First strategy will be to carefully pull apart the R-4B meter, if I can. If it won't come apart, I'll try taking apart the T-4XB meter. If I can get that one apart (and it looks like it will), I'll risk cracking the R-4B meter to do a scale transplant.

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Steve Wedge, W1ES/4

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From: Steve Wedge
Sent: Tuesday, May 21, 2013 2:12 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

I thought so, as it would make sense from a production standpoint. (Then I start thinking about those setscrew-less knobs and do a facepalm...)

I have a meter from a T-4XB, so if I can get that case open, I'm sitting pretty...

Thanks,

Steve Wedge, W1ES/4

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From: Garey Barrell
Sent: Tuesday, May 21, 2013 1:44 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

Steve -

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13855. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 01:59:12 UTC
From: Steve Wedge
Topic: 13849 Message: 13855

The plastic covers of both meters came off easily with a jackknife and a little finesse. You break the glue-line first.

Everything else was a quick swap!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Doug
Sent: Tuesday, May 21, 2013 6:49 PM
To: DrakeRadio@yahoogroups.com
Cc: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] R-4any S-meter

Steve,

Are your meters like the 4 line that have two screws that go though the plastic case? If so they are easy to take apart. You have to be very careful with the enamel wire loops that come out toward the meter front. If you don't know they're there they're hard to see.

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Sent from my iPhone

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> Sent: Tuesday, May 21, 2013 2:12 PM
> To: DrakeRadio@yahoogroups.com

> Subject: Re: [DrakeRadio] R-4any S-meter
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> From: Garey Barrell
> Sent: Tuesday, May 21, 2013 1:44 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
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> Steve -
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13856. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 02:02:29 UTC
From: Garey Barrell
Topic: 13849 Message: 13856

Report!! Photos!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> From: Steve Wedge
> Sent: Tuesday, May 21, 2013 2:12 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
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> From: Garey Barrell
> Sent: Tuesday, May 21, 2013 1:44 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
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> Steve -
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13857. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 02:09:23 UTC
From: Garey Barrell
Topic: 13849 Message: 13857

When all else fails, _RTFCD_!!!!

Last page of R-4B manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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13858. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 12:27:03 UTC
From: Steve Wedge
Topic: 13849 Message: 13858

Just opened the CD again. Sorry for the oversight - the schematic for the BPF assembly is indeed at the end of the R-4B manual! That's one extra that's much appreciated right about now. I was looking in the "B-Line Service Manual" because I was assuming it was a straight re-print with no additional pages

Re-ran the procedure from the CD and the top-left is definitely not peaking. I get to a max negative voltage as I turn the slug inward but it never peaks. The tuning at ".4" is definitely sharper than "1.2" but there's 2 S-units of loss at ".4" relative to "1.2".

Looking at S1B (rear) on the schematic - is that switch moving about 22 degrees with each detent, or 45? In other words, all capacitors in the filter are starting out connected together and grounded (and enabling all of the sections). When I move the switch to "1.2", am I correct in saying that C5/C8 get disconnected but C3/C7 remain grounded? It makes sense to me, since the signal appears to be going through S1A and through L3 and out when the band pass is fully widened.

Yep - I'm going to meter it anyway.

It looks like S1A is matching the input of the network, successively switching in more parallel resistance as your bandwidth is increased and also disconnecting L3 from C4 at "2.4" and "4.8".

Based on my symptoms, it looks like I'll start around S1B, R1/C1/C2, C5, 8, 10, 13, 17 and 20, with the problem probably around C1/C2/R1

If I rip this apart, I'll take pics.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, May 21, 2013 10:09 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

When all else fails, _RTFCD_!!!!

Last page of R-4B manual.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Swapped scales and both meters are still intact. The sluggish movement will probably be okay on a transmitter someday, should I need it.
>
> Losing 2 - 3 S units with the 400 Hz filter, so something's still not right there.
>
> Has anyone diagrammed which of the parts on the BPF board go with which coils? I'm still suspecting a bad part associated with the top-left coil (as viewed from the rear).
>
>

[Non-text portions of this message have been removed]

13859. Re: [DrakeRadio] R-4any S-meter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 13:00:15 UTC
From: Steve Wedge
Topic: 13849 Message: 13859

No photos, but I'll describe what I did.

1. Remove meter from radio. Do this by clipping the wires to the meter leads. DO NOT UNSCREW THE METER CONNECTIONS FROM THE BACK OF THE METER. There are two screws/nuts that hold the meter bracket to the chassis. The nuts are 1/4" and the screws are close enough to the edge in both places where you can hold the screw with a jackknife blade, if necessary, to keep the screw from turning.
2. With a knife, score around the perimeter of the back where the plastic meets the metal back of the meter.
3. Carefully get the knife between the plastic and metal and GENTLY work your way around the back. The two pieces should begin to separate. Pay attention to the meter face to ensure that it stays with the metal base and doesn't get pulled up with the plastic (and bending the pointer).
4. The plastic front should pop off without forcing it and without cracking the plastic. If you have a meter that doesn't meet the description here, proceed with caution!
5. The white plastic "pegs" that cover the metal pegs may fall off. They're less than 1/4" long, so be careful. Set them aside.
6. Remove the two screws that hold the face to the movement and remove the metal pegs that are held down by these screws.
7. Carefully remove the meter face. Be aware that you'll have to slide it "up", then lift the bottom to clear the pointer. Avoid touching the pointer as much as possible.
8. Installation of the face is the reverse of removal. Make sure the pegs are near the upper corners of the opening at the bottom.
9. With the meter facing up, carefully press the plastic front back onto the metal body. You'll need to go around, using your thumb and forefinger. The plastic will snap into place.
10. Reinstall the meter and its bracket to the chassis. Do this before attaching wires!
11. Desolder the connectors on the rear of the meter and remove the wire ends. Strip the wires you cut and re-solder to the meter terminals.
12. Admire your work and fire-up the rig!

Steve Wedge, W1ES/4

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From: Garey Barrell
Sent: Tuesday, May 21, 2013 10:02 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4any S-meter

Report!! Photos!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I quickly hooked up the T-4XB meter I have and it's definitely behaving better than the meter that's in the R-4B.
>
> First strategy will be to carefully pull apart the R-4B meter, if I can. If it won't come apart, I'll try taking apart the T-4XB meter. If I can get that one apart (and it looks like it will), I'll risk cracking the R-4B meter to do a scale transplant.
>
> Thanks for the advice, Garey. I sorta thought they had the same guts, but it doesn't hurt to ask...
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Steve Wedge
> Sent: Tuesday, May 21, 2013 2:12 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
>
>
>
> I thought so, as it would make sense from a production standpoint. (Then I start thinking about those setscrew-less knobs and do a facepalm...)
>
> I have a meter from a T-4XB, so if I can get that case open, I'm sitting pretty...
>
> Thanks,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
> From: Garey Barrell
> Sent: Tuesday, May 21, 2013 1:44 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4any S-meter
>
> Steve -
>

> The good news is that the S-Meters are all the same, from the 2-B
> through the R-4C.
>
> The not so good news is that the T-4X meters seem to be of two types.
> One sort is easy to open, the other is impossible! Also, the T-4X and
> early T-4XB meterhas a 0-400 mA scale, later B's and C's have a 0-500
> mA scale. Both movements are the same, 0-3 mA fs.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> I've arrived at the conclusion that the S-meter in this R-4B has got some mechanical problems. Right now, with the receiver off, the meter is reading S-2 and it hardly indicates anything at all unless there's a super-strong signal present.
>>
>> I'm tempted to work on it but I'd rather buy one first so if I mess with it and screw it up, I don't have a perfectly good receiver with a junk meter in it.
>>
>> Anyone got one for sale?
>>
>> Alternatively, I can't remember if this has been brought up before or not, but has anyone found if the transmitter meter is the same movement - and, if so, how hard is it to get the cover off so I can swap the scales?
>>
>> I know Garey has mentioned that these meters were super-cheap when Drake bought them, so I know I'm not dealing with something that's likely repairable...
>>
>>

[Non-text portions of this message have been removed]

13860. need a meter?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 13:10:05 UTC
From: yash@aol.com
Topic: 13860 Message: 13860

To the guy looking for a s meter,I have a meter from a t4x in the parts box. If this meter will work for your problem or you can use parts from this meter ,get back to me and I will send it out.
thanks
dale wt4t

[Non-text portions of this message have been removed]

13861. Re: [DrakeRadio] need a meter?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 14:39:42 UTC
From: Steve Wedge
Topic: 13860 Message: 13861

Thanks, Dale - I found one in my own junk box - also from a transmitter. It's working a lot better.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: yash@...
Sent: Wednesday, May 22, 2013 9:10 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] need a meter?

To the guy looking for a s meter,I have a meter from a t4x in the parts box. If this meter will work for your problem or you can use parts from this meter ,get back to me and I will send it out.
thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13862. PBT Preliminary findings

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 16:08:49 UTC
From: Steve Wedge
Topic: 13862 Message: 13862

I've identified the inductors. Looking from the rear:
Top Left = L1
Bottom Left = L2
Top Right = L3
Bottom Right = L4

I've removed the side cover from the left side to expose L1 and L2. The coil has continuity. Because this thing is such a pain to disassemble, I'm tempted to change C1, 2 and 3 but will refrain from C3 right now, as it looks like a SAT part (it has paint on it).

Now, to find a 1030 pf SM cap...

Steve Wedge, W1ES/4

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[Non-text portions of this message have been removed]

13863. TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 19:03:39 UTC
From: jdouglasrichardson
Topic: 13863 Message: 13863

This is a first post after lurking here for a while, trawling through the old posts re TR4s.
This radio is the better one of a pair I found at Nearfest earlier this May. The second set may end up as parts unit but except for missing its crystals is complete. They both are pretty scruffy but have pretty good front panels. This post is dealing with set serial #28594A.
Anyway...
First order of business was to get a copy of the K4OAH service CD for the TR4. It has been invaluable so far.
At this point heres what I have-
Receive is great on all bands.
Output is at specs on all bands, which was surprising to me.
However it won't tune on LSB on 80M. By not tuning I mean there is no rise in plate amps when in x-cw mode while sweeping the rf tune control. It will pick up the load as normal in USB.
40M tune is normal, LSB, ~ 200w carrier out. (uncalibrated Heath wattmeter but at good for relative readings) Good on air reports.
20M tunes normally USB. Good reports as well.
15M and the three 10M segments will tune only on LSB, same trouble description as 80M.
Had good reports today on 29.070 AM with this set.
I'm leaning towards a full alignment.
The CO crystal is from 'stock' (read junkbox) and dips on my MFJ 259B antenna analizer at 8.997 as best I can see. I replaced it because the original crystal lead was broken off flush with the crystal body.
Is there any hope for the old girl? I think there is but I could use some input.

KB1MCV / Jim

13864. Re: [DrakeRadio] TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 19:28:59 UTC
From: William Houghton
Topic: 13863 Message: 13864

Hi Jim,

"However it won't tune on LSB on 80M"

It's not supposed to. It will only tune on CW or AM when the SSB switch is in the "X" position. You might note that the CW position is labelled "X-CW" to remind you of this. So tune it up on CW with the SSB switch in the "X" posiiton and then switch to the SSB you want.

73,

Bill

From: jdouglasrichardson <jdouglasrichardson@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 22, 2013 12:12:31 PM
Subject: [DrakeRadio] TR4 recomission

This is a first post after lurking here for a while, trawling through the old posts re TR4s.
This radio is the better one of a pair I found at Nearfest earlier this May. The second set may end up as parts unit but except for missing its crystals is complete. They both are pretty scruffy but have pretty good front panels. This post is dealing with set serial #28594A.
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Is there any hope for the old girl? I think there is but I could use some input.

KB1MCV / Jim

[Non-text portions of this message have been removed]

13865. Re: [DrakeRadio] TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 19:56:30 UTC
From: Steve Wedge
Topic: 13863 Message: 13865

Hey, Jim -

Easiest first: the crystals are available from a number of sources, ICM, JAN and one in the UK called QuartSLab.

If you need more than one, the one in the UK may actually cost less.

It sounds like one of your crystal filters is bad or is not connecting. 80m on these radios is "upside-down" in the IF.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

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From: jdouglasrichardson
Sent: Wednesday, May 22, 2013 3:03 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR4 recomission

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This radio is the better one of a pair I found at Nearfest earlier this May. The second set may end up as parts unit but except for missing its crystals is complete. They both are pretty scruffy but have pretty good front panels. This post is dealing with set serial #28594A.
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Is there any hope for the old girl? I think there is but I could use some input.

KB1MCV / Jim

[Non-text portions of this message have been removed]

13866. Re: [DrakeRadio] TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 20:16:58 UTC
From: William Houghton
Topic: 13863 Message: 13866

Steve,

Since it receives fine on all bands its doubtful he has any issue with the xtal filters since it common practice to use LSB below 10MHz and USB above 10MHz.

Both the TR-4 and TR-4C produce a CW carrier by adding a DC bias to the balanced modulator allowing the 9MHz signal to pass through. This only happens when the SSB switch is in the "X" position. The X position is USB on 80m & 20m and is LSB on 40m, 15m, and all of 10m. This exactly matches Jim's observations of which sideband he can tune up on.

I don't know about the T4X(any) because I haven't used them.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 22, 2013 12:56:08 PM
Subject: Re: [DrakeRadio] TR4 recomission

Hey, Jim -

Easiest first: the crystals are available from a number of sources, ICM, JAN and one in the UK called QuartSLab.

If you need more than one, the one in the UK may actually cost less.

It sounds like one of your crystal filters is bad or is not connecting. 80m on these radios is "upside-down" in the IF.

73,

Steve Wedge, W1ES/4

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From: jdouglasrichardson
Sent: Wednesday, May 22, 2013 3:03 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR4 recomission

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Is there any hope for the old girl? I think there is but I could use some input.

KB1MCV / Jim

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13867. Re: [DrakeRadio] TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 20:30:21 UTC
From: Garey Barrell
Topic: 13863 Message: 13867

Bill -

I was not as confident based on his description, but I believe you are correct. I would have called it TUNE, for that reason! :-)

The T-4X(any) IS different. The Mic amp is converted to a phase shift audio oscillator around 1 kHz and injected into whichever sideband filter is selected, so it will TUNE on either one.

The Carrier Oscillator IS shifted for CW and AM into the LSB filter on these, and the BAL MOD is unbalanced with a DC bias.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Steve,
>
> Since it receives fine on all bands its doubtful he has any issue with the xtal
> filters since it common practice to use LSB below 10MHz and USB above 10MHz.
>
> Both the TR-4 and TR-4C produce a CW carrier by adding a DC bias to the balanced
> modulator allowing the 9MHz signal to pass through. This only happens when the
> SSB switch is in the "X" position. The X position is USB on 80m & 20m and is LSB
> on 40m, 15m, and all of 10m. This exactly matches Jim's observations of which
> sideband he can tune up on.
>
>
> I don't know about the T4X(any) because I haven't used them.
>
> 73,
>
> Bill
>
>
>
>
>
> _____
> From: Steve Wedge <w1es1982@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wed, May 22, 2013 12:56:08 PM
> Subject: Re: [DrakeRadio] TR4 recomission

>
>
> Hey, Jim -
>
> Easiest first: the crystals are available from a number of sources, ICM, JAN and
> one in the UK called QuartSLab.
>
> If you need more than one, the one in the UK may actually cost less.
>
> It sounds like one of your crystal filters is bad or is not connecting. 80m on
> these radios is "upside-down" in the IF.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended
> thereto.
>
> From: jdouglasrichardson
> Sent: Wednesday, May 22, 2013 3:03 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] TR4 recomission
>
> This is a first post after lurking here for a while, trawling through the old
> posts re TR4s.
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> second set may end up as parts unit but except for missing its crystals is
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> lead was broken off flush with the crystal body.
> Is there any hope for the old girl? I think there is but I could use some input.
>
> KB1MCV / Jim
>

13868. R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 22:13:57 UTC
From: w7jpg
Topic: 13868 Message: 13868

A R4B followed me home from a local swapmeet. Looked like it would present a challenge but the price was right and I need the practice. Call me a Wedge wannabe.

I am currently preparing a list of observed issues to share with you all. However, I am jumping the gun a bit because of an issue I discovered that may be my Waterloo before I even get my fingers dirty.

After some basic preparation of the radio for power, I brought it up slowly on a variac. No smoke! whew...!

First discovery was that the RF gain control was a replacement and is broken although was usable enough to get some noise. Audio is working, at least to let me hear a hum along with the noise.

I proceeded to see if the receiver would cooperate and hear some signals.

After trying a couple of bands, twisting the preselector control to get some noise peak (no noise peak), I quickly realized the preselector knob was twisting but the entire preselector assembly was not moving so the slugs weren't moving. I tightened the knob and tried again. The knob rotates because the vernier (?) is allowing it to rotate but the shaft on the other side of the vernier is not moving. I hooked up a shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist. Surprising that the two dial cord assemblies could resist the torque and not slip even if a slug was frozen.

Looked at the slug rack assembly and compared it to a healthy R-4B sittin them "side by side". The entire slug rack assembly of the swapmeet R4B appears to be "tilted" by a couple of degrees to the rear compared to being squared up with the chassis as the healthy R4B.

Each of the slug adjustment screws for T-1 through T-4 on the swapmeet R4B is corroded (rusted) at the point where they pass through the adjustment nut. A couple of the adj. screws are slightly bent above the nut. (appears to be a common affliction as one is slightly bent on the healthy R4B.

I have searched without success for any posts in this list(and elsewhere) that discuss this particular problem.

I am assuming that the entire slug rack mechanism could be frozen up if any one (or more than one) of the four slugs are frozen. Fair assumption? Or is it unlikely the slugs are frozen?

After RTFCD service manual, operation manual, etc., I found nothing on disassembling the preselector assembly. Tt looks doable but daunting, especially in light of the rust encapsulating the slug adjustment screws.

Am I the proud owner of a parts rig or is there someone that has conquered this problem and can share their successful R & R technique?

All responses will be appreciated.

73, Chris W7JPG

13869. Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 22:44:12 UTC
From: w7jpg
Topic: 13868 Message: 13869

First correction to the subject message. After sending my message, i could not resist going back to the source of my frustration.. this time aided by my Optivision lenses. The good news is that the lens magnification revealed just how bad my eyes are. The slug adjustment screws are not corroded as I stated in my message. As many of you already know, they are covered with some type of plastic/rubberized coating (rust colored, btw) to presumably prevent rust. Also the Optivision revealed the "dial cord" is really "dial cable" which would indeed resist a LOT of torque if slugs are frozen or some other yet undiscovered force has caused the shaft to seize.
Chris W7JPG

--- In DrakeRadio@yahoogroups.com, "w7jpg" <ckepus@...> wrote:
>
> A R4B followed me home from a local swapmeet. Looked like it would present a challenge but the price was right and I need the practice. Call me a Wedge wannabe.
>
> I am currently preparing a list of observed issues to share with you all. However, I am jumping the gun a bit because of an issue I discovered that may be my Waterloo before I even get my fingers dirty.
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> I proceeded to see if the receiver would cooperate and hear some signals.
>
> After trying a couple of bands, twisting the preselector control to get some noise peak (no noise peak), I quickly realized the preselector knob was twisting but the entire preselector assembly was not moving so the slugs weren't moving. I tightened the knob and tried again. The knob rotates because the vernier (?) is allowing it to rotate but the shaft on the other side of the vernier is not moving. I hooked up a shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist. Surprising that the two dial cord assemblies could resist the torque and not slip even if a slug was frozen.
>
> Looked at the slug rack assembly and compared it to a healthy R-4B sittin them "side by side". The entire slug rack assembly of the swapmeet R4B appears to be "tilted" by a couple of degrees to the rear compared to being squared up with the chassis as the healthy R4B.
>
> Each of the slug adjustment screws for T-1 through T-4 on the swapmeet R4B is corroded (rusted) at the point where they pass through the adjustment nut. A couple of the adj. screws are slightly bent above the nut. (appears to be a common affliction as one is slightly bent on the healthy R4B.

>
> I have searched without success for any posts in this list(and elsewhere) that discuss this particular problem.
>
> I am assuming that the entire slug rack mechanism could be frozen up if any one (or more than one) of the four slugs are frozen. Fair assumption? Or is it unlikely the slugs are frozen?
>
> After RTFCD service manual, operation manual, etc., I found nothing on disassembling the preselector assembly. Tt looks doable but daunting, especially in light of the rust encapsulating the slug adjustment screws.
>
> Am I the proud owner of a parts rig or is there someone that has conquered this problem and can share their successful R & R technique?
>
> All responses will be appreciated.
>
> 73, Chris W7JPG
>

13870. Re: TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 23:04:34 UTC
From: jdouglasrichardson
Topic: 13863 Message: 13870

Well,it looks like Bill nailed it.
Maybe I should work on my reading comprehension re the operating manual.
Made several contacts across the pond on 15M USB late this afternoon and and will be doing further operating later tonight.
I was suspecting the filters, in fact I swapped them earlier with the other radio which made no difference.
Next comes the major clean-up and de-tobacco residue-ing. The chassis will never win any beauty contests.
The other TR4 will be more of a challenge and I'm sure there will be
more questions.
This SSB mode may catch on.
(Except for the Kenwood TS830 the Drakes are the newest gear in the shack).
Thanks to all for the help.
73
KB1MCV / Jim

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Bill -
>
> I was not as confident based on his description, but I believe you are
> correct. I would have called it TUNE, for that reason! :-)
>
> The T-4X(any) IS different. The Mic amp is converted to a phase shift
> audio oscillator around 1 kHz and injected into whichever sideband
> filter is selected, so it will TUNE on either one.
>
> The Carrier Oscillator IS shifted for CW and AM into the LSB filter on
> these, and the BAL MOD is unbalanced with a DC bias.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
> > Steve,
> >
> > Since it receives fine on all bands its doubtful he has any issue with the xtal
> > filters since it common practice to use LSB below 10MHz and USB above 10MHz.
> >
> > Both the TR-4 and TR-4C produce a CW carrier by adding a DC bias to the balanced
> > modulator allowing the 9MHz signal to pass through. This only happens when the

> > SSB switch is in the "X" position. The X position is USB on 80m & 20m and is LSB
> > on 40m, 15m, and all of 10m. This exactly matches Jim's observations of which
> > sideband he can tune up on.
> >
> >
> > I don't know about the T4X(any) because I haven't used them.
> >
> > 73,
> >
> > Bill
> >
> >
> >
> >
> > _____
> > From: Steve Wedge <w1es1982@...>
> > To: DrakeRadio@yahoogroups.com
> > Sent: Wed, May 22, 2013 12:56:08 PM
> > Subject: Re: [DrakeRadio] TR4 recomission
> >
> >
> > Hey, Jim -
> >
> > Easiest first: the crystals are available from a number of sources, ICM, JAN and
> > one in the UK called QuartSLab.
> >
> > If you need more than one, the one in the UK may actually cost less.
> >
> > It sounds like one of your crystal filters is bad or is not connecting. 80m on
> > these radios is "upside-down" in the IF.
> >
> > 73,
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
> >
> > All my computers have my signature with various pearls of wisdom appended
> > thereto.
> >
> > From: jdouglasrichardson
> > Sent: Wednesday, May 22, 2013 3:03 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: [DrakeRadio] TR4 recomission
> >
> > This is a first post after lurking here for a while, trawling through the old
> > posts re TR4s.
> > This radio is the better one of a pair I found at Nearfest earlier this May. The
> > second set may end up as parts unit but except for missing its crystals is
> > complete. They both are pretty scruffy but have pretty good front panels. This

> > post is dealing with set serial #28594A.
> > Anyway...
> > First order of business was to get a copy of the K4OAH service CD for the TR4.
> > It has been invaluable so far.
> > At this point heres what I have-
> > Receive is great on all bands.
> > Output is at specs on all bands, which was surprising to me.
> > However it won't tune on LSB on 80M. By not tuning I mean there is no rise in
> > plate amps when in x-cw mode while sweeping the rf tune control. It will pick up
> > the load as normal in USB.
> > 40M tune is normal, LSB, ~ 200w carrier out. (uncalibrated Heath wattmeter but
> > at good for relative readings) Good on air reports.
> > 20M tunes normally USB. Good reports as well.
> > 15M and the three 10M segments will tune only on LSB, same trouble description
> > as 80M.
> > Had good reports today on 29.070 AM with this set.
> > I'm leaning towards a full alignment.
> > The CO crystal is from 'stock' (read junkbox) and dips on my MFJ 259B antenna
> > analizer at 8.997 as best I can see. I replaced it because the original crystal
> > lead was broken off flush with the crystal body.
> > Is there any hope for the old girl? I think there is but I could use some input.
> >
> > KB1MCV / Jim
> >
>
Well,it looks like Bill nailed it.
Maybe I should work on my reading comprehension re the operating manual.
Made several contacts across the pond on 15M USB late this afternoon and and will be doing further operating later tonight.
I was suspecting the filters, in fact I swapped them earlier with the other radio which made no difference.
Next comes the major clean-up

13871. L-4 Amplifier Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-22 23:23:20 UTC
From: slowcountry1
Topic: 13871 Message: 13871

As I have completed my TR-4 and TR-4Cw projects, I am turning my attention to my beloved L-4 amplifier. About 8 years ago, I rebuilt the power supply with new capacitors, upgraded diodes and bleeder resistors. I have recently replaced the foam seal material in the bottom of the case and added fans to move air through the power supply.

Are there any other components that should be replaced or given attention? I am running, what I assume to be, the original 3-400 1968 date code tubes; full output appears at 900 watts.

As a side note, I do not have any type of soft start for the amp. I do not use the power switch on the amp, I use the 220V breaker in the panel for turning the amp on and off.

Thanks,

Doug - N9XTF

13872. Re: [DrakeRadio] TR4 recomission

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 00:26:06 UTC
From: Steve Wedge
Topic: 13863 Message: 13872

Thought about that and you're right. I have a TR-4 here and I haven't really started working on it. My brain was in the Twins' architecture.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: William Houghton
Sent: Wednesday, May 22, 2013 4:16 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR4 recomission

Steve,

Since it receives fine on all bands its doubtful he has any issue with the xtal filters since it common practice to use LSB below 10MHz and USB above 10MHz.

Both the TR-4 and TR-4C produce a CW carrier by adding a DC bias to the balanced modulator allowing the 9MHz signal to pass through. This only happens when the SSB switch is in the "X" position. The X position is USB on 80m & 20m and is LSB on 40m, 15m, and all of 10m. This exactly matches Jim's observations of which sideband he can tune up on.

I don't know about the T4X(any) because I haven't used them.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 22, 2013 12:56:08 PM
Subject: Re: [DrakeRadio] TR4 recomission

Hey, Jim -

Easiest first: the crystals are available from a number of sources, ICM, JAN and one in the UK called QuartSLab.

If you need more than one, the one in the UK may actually cost less.

It sounds like one of your crystal filters is bad or is not connecting. 80m on these radios is "upside-down" in the IF.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: jdouglasrichardson
Sent: Wednesday, May 22, 2013 3:03 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] TR4 recomission

This is a first post after lurking here for a while, trawling through the old posts re TR4s.
This radio is the better one of a pair I found at Nearfest earlier this May. The second set may end up as parts unit but except for missing its crystals is complete. They both are pretty scruffy but have pretty good front panels. This post is dealing with set serial #28594A.
Anyway...
First order of business was to get a copy of the K4OAH service CD for the TR4. It has been invaluable so far.
At this point heres what I have-
Receive is great on all bands.
Output is at specs on all bands, which was surprising to me.
However it won't tune on LSB on 80M. By not tuning I mean there is no rise in plate amps when in x-cw mode while sweeping the rf tune control. It will pick up the load as normal in USB.
40M tune is normal, LSB, ~ 200w carrier out. (uncalibrated Heath wattmeter but at good for relative readings) Good on air reports.
20M tunes normally USB. Good reports as well.
15M and the three 10M segments will tune only on LSB, same trouble description as 80M.
Had good reports today on 29.070 AM with this set.
I'm leaning towards a full alignment.
The CO crystal is from 'stock' (read junkbox) and dips on my MFJ 259B antenna analizer at 8.997 as best I can see. I replaced it because the original crystal lead was broken off flush with the crystal body.
Is there any hope for the old girl? I think there is but I could use some input.

KB1MCV / Jim

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13873. Re: [DrakeRadio] R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 02:19:23 UTC
From: Don Cunningham
Topic: 13868 Message: 13873

Are you sure you aren't meaning to say you are working on a 2B receiver?? I've never seen "dial cord" in an R4B, and I have seen several.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3184/6348 - Release Date: 05/22/13

[Non-text portions of this message have been removed]

13874. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 02:21:44 UTC
From: Steve Wedge
Topic: 13868 Message: 13874

Chris -

Check the vernier drive. First, it should be pinned in place to the chassis so that it doesn't turn. Secondly, this is a ball-drive and it relies on the friction in the heavy grease normally used to lubricate it to allow the output shaft to move. If you're lucky, someone before you thought they were doing a great thing by wiping up all that "nasty" grease and giving it some nice, light 3-in-1 oil.

That's the wrong thing to do and will give you results similar to that old urban legend about the Rolls-Royce engineers polishing the innards of the GM automatic transmission they outsourced - only to find the thing wouldn't work, either. Both stories rely on friction.

If you don't see grease, you may have to take it apart and put some nice, heavy wheel-bearing grease in there. Be aware that many of these have open fronts and at first glance they look like they ought not to work at all.

You might be able to find a ball-drive around if it's hosed.

The RF GAIN pot is easily replaceable with a Radio Shack (really!) part. The shaft on the RS part is way too long, but you've got a Dremel, right? I returned three R-4B's to service that needed those pots replaced and replaced them all with the RS part. Just match up the length and cut before installing...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w7jpg
Sent: Wednesday, May 22, 2013 6:44 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R4B challenge

First correction to the subject message. After sending my message, i could not resist going back to the source of my frustration.. this time aided by my Optivision lenses. The good news is that the lens magnification revealed just how bad my eyes are. The slug adjustment screws are not corroded as I stated in my message. As many of you already know, they are covered with some type of plastic/rubberized coating (rust colored, btw) to presumably prevent rust. Also the Optivision revealed the "dial cord" is really "dial cable" which would indeed resist a LOT of torque if slugs are frozen or some other yet undiscovered force has caused the shaft to seize.
Chris W7JPG

--- In DrakeRadio@yahoogroups.com, "w7jpg" <ckepus@...> wrote:
>
> A R4B followed me home from a local swapmeet. Looked like it would present a challenge but the price was right and I need the practice. Call me a Wedge wannabe.

>
> I am currently preparing a list of observed issues to share with you all. However, I am jumping the gun a bit because of an issue I discovered that may be my Waterloo before I even get my fingers dirty.
>
> After some basic preparation of the radio for power, I brought it up slowly on a variac. No smoke! whew...!
>
> First discovery was that the RF gain control was a replacement and is broken although was usable enough to get some noise. Audio is working, at least to let me hear a hum along with the noise.
>
> I proceeded to see if the receiver would cooperate and hear some signals.
>
> After trying a couple of bands, twisting the preselector control to get some noise peak (no noise peak), I quickly realized the preselector knob was twisting but the entire preselector assembly was not moving so the slugs weren't moving. I tightened the knob and tried again. The knob rotates because the vernier (?) is allowing it to rotate but the shaft on the other side of the vernier is not moving. I hooked up a shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist. Surprising that the two dial cord assemblies could resist the torque and not slip even if a slug was frozen.
>
> Looked at the slug rack assembly and compared it to a healthy R-4B sittin them "side by side". The entire slug rack assembly of the swapmeet R4B appears to be "tilted" by a couple of degrees to the rear compared to being squared up with the chassis as the healthy R4B.
>
> Each of the slug adjustment screws for T-1 through T-4 on the swapmeet R4B is corroded (rusted) at the point where they pass through the adjustment nut. A couple of the adj. screws are slightly bent above the nut. (appears to be a common affliction as one is slightly bent on the healthy R4B.
>
> I have searched without success for any posts in this list(and elsewhere) that discuss this particular problem.
>
> I am assuming that the entire slug rack mechanism could be frozen up if any one (or more than one) of the four slugs are frozen. Fair assumption? Or is it unlikely the slugs are frozen?
>
> After RTFCD service manual, operation manual, etc., I found nothing on disassembling the preselector assembly. Tt looks doable but daunting, especially in light of the rust encapsulating the slug adjustment screws.
>
> Am I the proud owner of a parts rig or is there someone that has conquered this problem and can share their successful R & R technique?
>
> All responses will be appreciated.
>
> 73, Chris W7JPG
>

[Non-text portions of this message have been removed]

13875. Re: [DrakeRadio] R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 02:33:04 UTC
From: Garey Barrell
Topic: 13868 Message: 13875

Don -

I think he's referring to the steel cord on the back end of the
Preselector rack. Sounds like the rack has takena hit, is binding and
too stiff for the ball drive. Steve's 'on the case'! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Are you sure you aren't meaning to say you are working on a 2B receiver?? I've never seen "dial cord" in an R4B, and I have seen several.
> 73,
> Don, WB5HAK
>

13876. Re: [DrakeRadio] R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 02:39:00 UTC
From: Don Cunningham
Topic: 13868 Message: 13876

Well, goes to show you I've never had to deal with that one, huh?? Sorry for him though if Steve is on t he case!!!!!!!!!!!! :>))
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3184/6348 - Release Date: 05/22/13

[Non-text portions of this message have been removed]

13877. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 03:55:05 UTC
From: Jim Shorney
Topic: 13868 Message: 13877

On Wed, 22 May 2013 22:21:44 -0400, Steve Wedge wrote:

>If you don't see grease, you may have to take it apart and put some nice, heavy wheel-bearing grease in there.

I've heard that you don't want to use automotive wheel bearing grease on these because of some of the "stuff" that they put in it. I've used Phil Woods Bicycle Grease on Jackson drives in the past with good results. I've also used Triflow PTFE-based bicycle gease on a couple of drives out of a Swan rig.

The procedure was to remove the drives and spray/soak them with brake parts cleaner. You may need to work the mechanism a bit to break up any hardened grease - don't disassemble, you will probably regret it. The new lube can be forced into the drive via the "female" end with the end of a pot shaft (the cut-offs from those long Radio Shack pots that someone mentioned work well), then I gently chuck the knob end of the drive in a drill and spin it for a while to distribute the grease. Best to remove setscrews before this step, I watched one vibrate out and fall into that warp zone 1/2 inch above the floor, never to be seen again. Ace Hardware had a suitable replacement.... Apply more grease if necessary, and repeat.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13878. Re: [DrakeRadio] need a meter?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 06:19:25 UTC
From: William Houghton
Topic: 13860 Message: 13878

Hi Dale,

Do you have a good plastic cover for a meter from a T4X? My 2B has a crack in the plastic cover.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 22, 2013 7:39:20 AM
Subject: Re: [DrakeRadio] need a meter?

Thanks, Dale - I found one in my own junk box - also from a transmitter. It's working a lot better.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: yash@...
Sent: Wednesday, May 22, 2013 9:10 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] need a meter?

To the guy looking for a s meter,I have a meter from a t4x in the parts box. If this meter will work for your problem or you can use parts from this meter ,get back to me and I will send it out.
thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13879. Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 06:40:10 UTC
From: Chris Kepus
Topic: 13868 Message: 13879

Nice to see the first bunch of responses. Thanks. I spent some more time poking around tonight. Unfortunately, I will be QRT for about 24 hours from troubleshooting due to interference from life's responsibilities. ;-(

To Don: Garey responded to the existence of cable drive system first: actually there are two sets of cable drives on the preselector shaft assembly, one at the front and one at the rear. Also, you must have missed my comment that I am a Wedge wannabe.. between Wedge, Barrell, and the rest of this list, I just might get this radio running!!!!! :-O

To Steve: Thanks for your comments and direction: Regarding the preselector vernier: My vernier drive is solidly pinned to the chassis. The open side faces the rear and it "looks" like it is lubed with heavy grease. Please comment on what I said in a prior message - "I hooked up a shaft extension to the rear of the preselector shaft, put a (large) knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist (rotate)." Even if the vernier was "stiff", could it possibly be "stiff" enough to resist the twist I was exerting on it? What else in this system would lock up to the point to prevent the shaft from rotating?

Regarding the RF gain pot: I have a RS close enough to get to tomorrow during my "responsibilities" run. Thanks!! J

To Jim S.: I'll give the vernier a shot of brake cleaner with everything in place as I sure don't want to disassemble the vernier or take that shaft out of there unless it there was no other choice. Thanks for the tips on the best way to grease the pig.

Chris, W7JPG

"Any day above ground is a good day"

[Non-text portions of this message have been removed]

13880. Re: [DrakeRadio] R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 11:04:39 UTC
From: Steve Wedge
Topic: 13868 Message: 13880

He meant the cable on the slug rack.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Don Cunningham
Sent: Wednesday, May 22, 2013 10:19 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R4B challenge

Are you sure you aren't meaning to say you are working on a 2B receiver?? I've never seen "dial cord" in an R4B, and I have seen several.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3184/6348 - Release Date: 05/22/13

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13881. Re: [DrakeRadio] R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 11:07:10 UTC
From: Steve Wedge
Topic: 13868 Message: 13881

Hey, I just had a taste of my toes earlier yesterday with that TR-4 opposite-sideband issue. I was thinking the thing had PBT, which, of course, it doesn't

It happens...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Don Cunningham
Sent: Wednesday, May 22, 2013 10:39 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R4B challenge

Well, goes to show you I've never had to deal with that one, huh?? Sorry for him though if Steve is on t he case!!!!!!!!!!! :>))
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3184/6348 - Release Date: 05/22/13

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13882. Re: [DrakeRadio] need a meter?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 11:15:22 UTC
From: yash@aol.com
Topic: 13860 Message: 13882

Bill
the cover of the t4x meter is fine.
dale wt4t

-----Original Message-----
From: William Houghton <rdrbill@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Thu, May 23, 2013 2:19 am
Subject: Re: [DrakeRadio] need a meter?

Hi Dale,

Do you have a good plastic cover for a meter from a T4X? My 2B has a crack in the plastic cover.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, May 22, 2013 7:39:20 AM
Subject: Re: [DrakeRadio] need a meter?

Thanks, Dale - I found one in my own junk box - also from a transmitter. It's working a lot better.

73,

Steve Wedge, W1ES/4

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All my computers have my signature with various pearls of wisdom appended thereto.

From: yash@...
Sent: Wednesday, May 22, 2013 9:10 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] need a meter?

To the guy looking for a s meter,I have a meter from a t4x in the parts box. If this meter will work for your problem or you can use parts from this meter ,get back to me and I will send it out.
thanks
dale wt4t

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13883. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 11:22:48 UTC
From: Steve Wedge
Topic: 13868 Message: 13883

Interesting.

I wonder what the factory used.

The best advice I can give is one of Murphy's old maxims: if it ain't broke, don't mess with it.

I used GP grease that I still have that I originally bought for wheel bearings, but I've only had to re-lube one. I had another one that a PO had buggered-up to a fare-thee-well and had fabricated (read: kludged) a replacement bracket out of sheet metal. It didn't work and it definitely wasn't pretty.

Reminder to all: at least on the A- and B-Lines, the ball drives are different on the receiver and transmitter. You might get them to "work" by playing with shaft lengths (and kludging them) but the pointers will never fall in the right areas.

For those of you with broken drives who aren't concerned with authenticity, remember that the original R-4 was directly-driven. You can still just attach a standard pointer knob, with a short shaft to couple, and use it that way until you find a suitable part.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Jim Shorney
Sent: Wednesday, May 22, 2013 11:55 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: R4B challenge

On Wed, 22 May 2013 22:21:44 -0400, Steve Wedge wrote:

>If you don't see grease, you may have to take it apart and put some nice, heavy wheel-bearing grease in there.

I've heard that you don't want to use automotive wheel bearing grease on these because of some of the "stuff" that they put in it. I've used Phil Woods Bicycle Grease on Jackson drives in the past with good results. I've also used Triflow PTFE-based bicycle gease on a couple of drives out of a Swan rig.

The procedure was to remove the drives and spray/soak them with brake parts cleaner. You may need to work the mechanism a bit to break up any hardened grease - don't disassemble, you will probably regret it. The new lube can be forced into the drive via the "female" end with the end of a pot shaft (the cut-offs from those long Radio Shack pots that someone mentioned work well), then I gently chuck the knob end of the drive in a drill and spin it for a while to distribute the grease. Best to remove setscrews before this step, I

watched one vibrate out and fall into that warp zone 1/2 inch above the floor, never to be seen again. Ace Hardware had a suitable replacement.... Apply more grease if necessary, and repeat.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

[Non-text portions of this message have been removed]

13884. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 11:27:39 UTC
From: Steve Wedge
Topic: 13868 Message: 13884

Ah, I misunderstood. It's my ADD kicking in...

I thought there was no rotation on the output side with rotation of the input side. If it's frozen, try Jim's idea. Put some paper towels under and around it and you should be all set. You may wind up having to remove it - be careful with the mounting shaft. You will have to un-crimp the end to get it out. They do come apart quite easily, so you should be able to clean it out.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Chris Kepus
Sent: Thursday, May 23, 2013 2:40 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R4B challenge

Nice to see the first bunch of responses. Thanks. I spent some more time poking around tonight. Unfortunately, I will be QRT for about 24 hours from troubleshooting due to interference from life's responsibilities. ;-(

To Don: Garey responded to the existence of cable drive system first: actually there are two sets of cable drives on the preselector shaft assembly, one at the front and one at the rear. Also, you must have missed my comment that I am a Wedge wannabe.. between Wedge, Barrell, and the rest of this list, I just might get this radio running!!!!! :-O

To Steve: Thanks for your comments and direction: Regarding the preselector vernier: My vernier drive is solidly pinned to the chassis. The open side faces the rear and it "looks" like it is lubed with heavy grease. Please comment on what I said in a prior message - "I hooked up a shaft extension to the rear of the preselector shaft, put a (large) knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist (rotate)." Even if the vernier was "stiff", could it possibly be "stiff" enough to resist the twist I was exerting on it? What else in this system would lock up to the point to prevent the shaft from rotating?

Regarding the RF gain pot: I have a RS close enough to get to tomorrow during my "responsibilities" run. Thanks!! J

To Jim S.: I'll give the vernier a shot of brake cleaner with everything in place as I sure don't want to disassemble the vernier or take that shaft out of there unless it there was no other choice. Thanks for the tips on the best way to grease the pig.

Chris, W7JPG

"Any day above ground is a good day"

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13885. TR-7 AVC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 14:47:44 UTC
From: Garey Barrell
Topic: 13885 Message: 13885

Jim and other 7 experts -

Part of my PS-7 Power Supply repair project included replacing a dead 500 Hz filter. This resulted in the TR-7 being over on the bench, away from it's R-7 buddy. I switched my 'antenna' (I use the term loosely) and was listening around the bands after the repairs.

It seemed like the AVC was too FAST for my taste on CW, in fact I was unable to tell much difference between FAST and SLOW. So I came back to the other desk and tried the TR-7 that was there. SAME!? I then switched in the R-7 and found the SLOW / CW AVC much more to my taste. Since I normally use the TR-7/R-7 as a 'pair' I hadn't really noticed it before.

Looking through the manual (!), I noticed that the t/c for the AVC is not specified, BUT that the AVC is 'further tailored' by the MODE switch. Sure enough, if I switch the TR-7 to LSB, the slower AVC that I like was there!

As I have mentioned before, my operating is almost all CW, 30 - 40 wpm, and relaxed chatting. I like the slow AVC that quiets down all the receiver noise between code elements. Back when I was chasing DX and handling traffic, I used QSK and tolerated the noise, but I don't need that instant reaction any more and so prefer my slow AVC.

All this is just for background. I haven't looked at the service manual yet to see if there is a 'non-invasive' way to change this. I know there has been quite a bit of discussion on the list about the AVC system, but honestly I haven't paid much attention to it for a while. It's not a major concern, as I use the R-7 with its more flexible AVC system anyway, just a curiosity.

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

13886. Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 14:47:58 UTC
From: jimgg
Topic: 13886 Message: 13886

I came home from Dayton with a nice 2B w Qmult. Everything is fine, except I notice the preselector does not peak on the low end of 80 meters. Everywhere else is good, and if I could tune the preselector just a bit lower, 80CW would be also. I see from the schematic that C5 looks as if it might adjust this. Does anyone know for sure?

Thanks for any help.

Jim K8JG

13887. Re: [DrakeRadio] Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 14:58:42 UTC
From: Ethan Blanton
Topic: 13886 Message: 13887

jimgg spake unto us the following wisdom:
> I came home from Dayton with a nice 2B w Qmult. Everything is fine,
> except I notice the preselector does not peak on the low end of 80
> meters. Everywhere else is good, and if I could tune the preselector
> just a bit lower, 80CW would be also. I see from the schematic that
> C5 looks as if it might adjust this. Does anyone know for sure?

I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
far out of line with reality that I didn't even ask.

Ethan

13888. Re: [DrakeRadio] Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 15:14:28 UTC
From: Garey Barrell
Topic: 13886 Message: 13888

Jim -

Welcome to the group!

Do you not have the manual?? Keep in mind that the 2-B is essentially an 80M receiver, with crystal controlled converters switched in front of it for the higher bands. It's important that the IF oscillators, (405 kHz and 50 kHz,) be accurately on frequency. Use the crystal calibrator if you're lucky enough to have gotten one with the receiver. If not, you may be able to connect the antenna to the antenna port of another receiver with a calibrator. If your 'other' radio is a transceiver, do not connectthe antennas together, tune the transceiver into a dummy load and connect a sampler wire to the 2-B antenna jack and hold the other end near the transceiver. Be careful to not disturb the tiny 'incremental' coils wired between the BAND switch tags on the higher bands.

First, set the Preselector pointer on 10 when it is turned fully clockwise. Once that is done, you want to align the Preselector on 40M first, and peak L2 and L4 with the dial set to the middle of the band and the Preselector set near the middle of the 40M segment onthe Preselector scale. Then switch to 80M, set the dial to 3800 kHz, peak the Preselector and then adjust C5. Wiggle the Preselector and C5 as there is a little interaction between the two.

If you don't have the manual, you might want to look at my Service Supplement CD for the 2-B. It has high resolution scans of the manual and high resolution color photos of the chassis with all parts annotated and keyed to a parts list. See infoat <www.k4oah.com>.

Again, welcome to the group, and you have a terrific radio there!! One of the best made by Drake and maybe anybody else......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

jimgg wrote:
> I came home from Dayton with a nice 2B w Qmult. Everything is fine, except I notice the preselector does not peak on the low end of 80 meters. Everywhere else is good, and if I could tune the preselector just a bit lower, 80CW would be also. I see from the schematic that C5 looks as if it might adjust this. Does anyone know for sure?
>
> Thanks for any help.

>
> Jim K8JG
>
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> Yahoo! Groups Links
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13889. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 15:15:19 UTC
From: Don Cunningham
Topic: 13868 Message: 13889

I should have read your second post better Chris and the "slug rack" would have come to mind. Hope your other troubleshooting goes better, but the brake cleaner sounds like a good try if you can protect plastic parts well, and that shouldn't be too bad. Life often gets in the way of "radioing", hi.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3184/6350 - Release Date: 05/23/13

[Non-text portions of this message have been removed]

13890. Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 16:26:37 UTC
From: qrpcwop
Topic: 13886 Message: 13890

--- In DrakeRadio@yahoogroups.com, Ethan Blanton <ethan.blanton@...> wrote:

>
> I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
> but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
> far out of line with reality that I didn't even ask.

$175? Ouch! I recently acquired a 2B, but I'll certainly settle for a non-matching Q-multiplier, or even roll my own before coughing up that much.

Al, K2ZN

13891. Re: [DrakeRadio] Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 16:30:37 UTC
From: Barry
Topic: 13886 Message: 13891

eBay item 171045539140.

Not mine, don't know the seller, etc. Just thought I'd pass it along given the subject matter.

Thanks,
Barry - N4BUQ

----- Original Message -----
> From: "qrpcwop" <k2zn@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, May 23, 2013 11:26:37 AM
> Subject: [DrakeRadio] Re: Drake 2B preselector
>
>
>
> --- In DrakeRadio@yahoogroups.com, Ethan Blanton <ethan.blanton@...>
> wrote:
>
> >
> > I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't
> > see
> > but one, exactly one, 2-CQ! The guy wanted $175 for it, which is
> > so
> > far out of line with reality that I didn't even ask.
>
> $175? Ouch! I recently acquired a 2B, but I'll certainly settle for
> a non-matching Q-multiplier, or even roll my own before coughing up
> that much.
>
> Al, K2ZN
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> Yahoo! Groups Links
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13892. Re: [DrakeRadio] Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 17:37:19 UTC
From: Ethan Blanton
Topic: 13886 Message: 13892

qrpcwop spake unto us the following wisdom:
> > I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
> > but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
> > far out of line with reality that I didn't even ask.
>
> $175? Ouch! I recently acquired a 2B, but I'll certainly settle for a
> non-matching Q-multiplier, or even roll my own before coughing up that
> much.

The 2-AQ and 2-BQ are both "correct" for a 2-B. I have both a 2-B and a 2-C, and zero Q multipliers, so any of the three work for me! It appears that a realistic price for a Q multiplier in pretty good (not a technical term) condition is $80-100, plus or minus a few dollars for shipping. They move every few days on the 'bay, and are USUALLY available at hamfests -- just not Dayton 2013! The price is not that much more than a 2-line speaker w/out multiplier, I guess most guys either bought a Q multiplier or used a third-party speaker, back in the day.

Good luck finding one, hope we don't bid against each other. ;-)

Ethan

13893. Re: [DrakeRadio] Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 18:00:52 UTC
From: Garey Barrell
Topic: 13886 Message: 13893

Al -

Don't forget the Heathkit QF-1. Same device, just no speaker. $10 at
most hamfests.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrpcwop wrote:
>
> --- In DrakeRadio@yahoogroups.com, Ethan Blanton <ethan.blanton@...> wrote:
>
>> I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
>> but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
>> far out of line with reality that I didn't even ask.
> $175? Ouch! I recently acquired a 2B, but I'll certainly settle for a non-matching
Q-multiplier, or even roll my own before coughing up that much.
>
> Al, K2ZN
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13894. Re: [DrakeRadio] Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 18:28:13 UTC
From: Ian Wilson
Topic: 13886 Message: 13894

Interesting. For some reason I'd imagined that the 2BQ worked
on the 5okHz IF. Looking at the manual, I see that I was wrong:
it does indeed work on the 455kHz IF, so any Q-multiplier for
this IF should work.

I pick up QF-1's occasionally at swap meets, etc, with the intention of
reusing the enclosures but am then unable to bring myself to do that :)

73, ian K3IMW

On Thu, May 23, 2013 at 11:00 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Al -
>
> Don't forget the Heathkit QF-1. Same device, just no speaker. $10 at
> most hamfests.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> qrpcwop wrote:
> >
> > --- In DrakeRadio@yahoogroups.com, Ethan Blanton <ethan.blanton@...>
> wrote:
> >
> >> I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
> >> but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
> >> far out of line with reality that I didn't even ask.
> > $175? Ouch! I recently acquired a 2B, but I'll certainly settle for a
> non-matching Q-multiplier, or even roll my own before coughing up that much.
> >
> > Al, K2ZN
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[Non-text portions of this message have been removed]

13895. TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 20:46:22 UTC
From: k4swisscheese
Topic: 4985 Message: 13895

I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
Thanks & 73 de Chuck K4SC

13896. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 21:11:25 UTC
From: Doug
Topic: 4985 Message: 13896

Chuck,

I'd be curious to know what price range you had to acquire the TR-6. I have serial number 409. I paid upwards of $800 about 6 years ago. A ridiculous price but I wanted it badly to go with the rest of my Drake gear. I have toyed with the idea of selling it but haven't pulled the trigger.

I'm in no way shape or form an expert or anything close to it. Most of refurbish work will translate from all of the tr-4, TR-4c stuff posts on the various websites; cleaning, power supply rebuild, checking the screen and grid resistora, hayseed hams replacement electrolytics etc.

Stick around, Garey or one of the intelligent ones will have some additional answers for you.

Sent from my iPhone

On May 23, 2013, at 16:46, "k4swisscheese" <k4swisscheese@...> wrote:

> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
> Thanks & 73 de Chuck K4SC
>
>

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[Non-text portions of this message have been removed]

13897. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 22:02:50 UTC
From: Garey Barrell
Topic: 4985 Message: 13897

Chuck -

I don't know much about the TR-6, never owned one! Near as I have been able to determine, it was built from 1968 to 1974, with probably a little under 600 units built. The highest one we're aware of is s/n 570, and shows a build date of 1974. I suspect that was a 'post-mortem' that someone 'really wanted'. Does yours happen to have the paper 'final test' tag attached? Lacking that, date codes from the crystals and/or electrolytic capacitor can give an idea of it's 'birthday'.

I have two schematics, and a copy of Milt Sullivan's original manual. Near as I can tell, the last schematic was published 12/31/70, unfortunately without a s/n suffix. I'd be interested if anyone has a later version.

Restoration recommendations would include WA8SAI or WB4HFN.

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

k4swisscheese wrote:
> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
> Thanks & 73 de Chuck K4SC
>
>
>

13898. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 22:10:38 UTC
From: Dan Galligan
Topic: 4985 Message: 13898

I believe that Garey meant WA8SAJ, not SAI. One of the best Drake guys, anywhere.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On May 23, 2013, at 15:02, Garey Barrell <k4oah@...> wrote:

> Restoration recommendations would include WA8SAI or WB4HFN.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

[Non-text portions of this message have been removed]

13899. TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 23:05:44 UTC
From: Richard Harder
Topic: 13899 Message: 13899

Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
Any comments are appreciated.

73'
Richard

13900. Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 23:21:42 UTC
From: fred
Topic: 13886 Message: 13900

Yes that does seem kind of high .
several years ago I was given a 2B/2CQ and about 4 months ago I saw on one of the swap/sell lists that someone had a 2C/2BQ . after exchanging pictures of them I got my 2BQ and he got the 2CQ .
good luck finding one
andrew
kd5pnt

--- In DrakeRadio@...m, "qrpcwop" <k2zn@...> wrote:
>
>
>
> --- In DrakeRadio@yahoogroups.com, Ethan Blanton <ethan.blanton@> wrote:
>
> >
> > I'm jealous! I was looking for a 2-{ABC}Q at Dayton, and didn't see
> > but one, exactly one, 2-CQ! The guy wanted $175 for it, which is so
> > far out of line with reality that I didn't even ask.
>
> $175? Ouch! I recently acquired a 2B, but I'll certainly settle for a non-matching Q-multiplier, or even roll my own before coughing up that much.
>
> Al, K2ZN
>

13901. What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 23:35:41 UTC
From: KG0MN
Topic: 13901 Message: 13901

I assume the B model is newer and has many improvements made to it. Can a L4 be made into a B-model without out spending an arm and a leg? Is the L4 a decent amp without any major faults?

Thanks and 73
Kevin - KG0MN

13902. Re: TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-23 23:53:01 UTC
From: fred
Topic: 13899 Message: 13902

I have a 1011D that was doing that but it also had another problem . the metre is the edge reading one like the TR3 and I suspect the TR4 has the same type . mine was stuck on about the 20 ma mark on the scale and would not go to 0 pulled it out and noticed a small round disk stuck in the metre gap that was keeping it from going to 0 . removed the disk and since I could not find where it came from I left it out , the metre was very bouncy and would not settle down . took metre apart again and saw a bit of cement on the underside of the metre and stuck the disk back there with a bit of G/C service cement . the metre now works smoothly and is not bouncy . the disk was the magnetic damping .
the drake may have something similar .
good luck .
andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, "Richard Harder" <harderr@...> wrote:
>
> Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
> Any comments are appreciated.
>
> 73'
> Richard
>

13903. Re: [DrakeRadio] Re: Drake 2B preselector

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 00:28:11 UTC
From: Al Scanandoah
Topic: 13886 Message: 13903

Yeah, I'm kicking myself right now. I had a GD-125 collecting dust on the shelf for years, but sold it a while back in order to make room for more (different) stuff... to sit on the shelf and collect dust.

<sigh>

Al, K2ZN

On 05/23/2013 02:00 PM, Garey Barrell wrote:
> Al -
>
> Don't forget the Heathkit QF-1. Same device, just no speaker. $10 at
> most hamfests.
>

13904. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 00:39:12 UTC
From: Richard Knoppow
Topic: 13899 Message: 13904

----- Original Message -----
From: "Richard Harder" <harderr@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 23, 2013 4:05 PM
Subject: [DrakeRadio] TR-4C PLATE CURRENT METER

> Does the plate current meter movement have internal
> dampening? I have recently gotten this rig on the air and
> noticed the plate current meter reminds me of a jalopy
> having no rear shocks or totally worn out rear shocks. The
> meter pointer will eventually stabilize as long as nothing
> is adjusted or there is no applied modulation. The pointer
> just swings loosy-goosy. The rig is new to me and is my
> first TR-4C.
> Any comments are appreciated.
>
> 73'
> Richard
>
If its the same meter as on the TR-4, and I think it is,
its just bouncy. In fact both meters are bouncy. I doubt if
much can be done about it. Just cheap meters.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13905. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 00:52:07 UTC
From: Chgypsy@...
Topic: 13899 Message: 13905

Bouncy meters
Don't know if this is the same thing .....but.

I did have a TR4 with bouncy meters a while back. Geez; how time flies.....
Wound up being static cling....no joke. Someone (on a Drake list) advised to use a sheet of clothes dryer fabric softener and wipe the outer surface. Problem went away. Carl wd8nhk

[Non-text portions of this message have been removed]

13906. Re: What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 00:54:20 UTC
From: Doug
Topic: 13901 Message: 13906

I own an L-4. The differences I am aware of is the L-4 has the ALC pot on the back of the RF deck instead of the front panel, does not have a standby switch and came with 3-400z instead of 3-500z tubes. As far as I know mine has he original finals and produces 900 watts + - with about 85 watts drive.

For longevity concerns, I rebuilt the power supply about 10 years ago. I have recently replaced the foam seal on the air compartment, oiled the fan and installed two 12VDC fans to move air through the PS. Other than thinking of adding a soft start I don't know what else I would do to it.

One could and have made it legal limit by building a new PS but 900 watts vs 1500 just doesn't seem like a big deal and may push the components closer to their tolerances.

I'm more concerned about finding out if there are any other components that should be changed out due to their age.

Doug -N9XTF

Sent from my iPhone

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

13907. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 00:59:28 UTC
From: Doug
Topic: 13899 Message: 13907

My TR-4 meters are bouncy and my TR-4Cw meters are much more dampened. There is a magnet on top of the movement that dampened it somewhat and also controls the zero of the needle. The coil wires loop out towards the mounting screws and I suspect that they may have some electrical dampening.

Does the S-meter act the same way as the plate current meter?

Doug -N9XTF

Sent from my iPhone

On May 23, 2013, at 19:05, "Richard Harder" <harderr@bellsouth.net> wrote:

> Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
> Any comments are appreciated.
>
> 73'
> Richard
>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

13908. Re: [DrakeRadio] What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 01:01:15 UTC
From: Doug
Topic: 13901 Message: 13908

I own an L-4. The differences I am aware of is the L-4 has the ALC pot on the back of the RF deck instead of the front panel, does not have a standby switch and came with 3-400z instead of 3-500z tubes. As far as I know mine has he original finals and produces 900 watts + - with about 85 watts drive.

For longevity concerns, I rebuilt the power supply about 10 years ago. I have recently replaced the foam seal on the air compartment, oiled the fan and installed two 12VDC fans to move air through the PS. Other than thinking of adding a soft start I don't know what else I would do to it.

One could and have made it legal limit by building a new PS but 900 watts vs 1500 just doesn't seem like a big deal and may push the components closer to their tolerances.

I'm more concerned about finding out if there are any other components that should be changed out due to their age.

Doug -N9XTF

Sent from my iPhone

Sent from my iPhone

On May 23, 2013, at 19:35, "KG0MN" <kg0mn@...> wrote:

> I assume the B model is newer and has many improvements made to it. Can a L4 be made into a B-model without out spending an arm and a leg? Is the L4 a decent amp without any major faults?
>
> Thanks and 73
> Kevin - KG0MN
>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

13909. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 01:48:21 UTC
From: Steve Wedge
Topic: 13899 Message: 13909

Might be able to damp it a little with some external R/C components...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Thursday, May 23, 2013 8:39 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-4C PLATE CURRENT METER

----- Original Message -----
From: "Richard Harder" <harderr@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 23, 2013 4:05 PM
Subject: [DrakeRadio] TR-4C PLATE CURRENT METER

> Does the plate current meter movement have internal
> dampening? I have recently gotten this rig on the air and
> noticed the plate current meter reminds me of a jalopy
> having no rear shocks or totally worn out rear shocks. The
> meter pointer will eventually stabilize as long as nothing
> is adjusted or there is no applied modulation. The pointer
> just swings loosy-goosy. The rig is new to me and is my
> first TR-4C.
> Any comments are appreciated.
>
> 73'
> Richard
>
If its the same meter as on the TR-4, and I think it is,
its just bouncy. In fact both meters are bouncy. I doubt if
much can be done about it. Just cheap meters.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13910. Re: [DrakeRadio] TR-7 AVC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 02:24:11 UTC
From: Jim Shorney
Topic: 13885 Message: 13910

Great input, Garey. Thanks!

73

-Jim

On Thu, 23 May 2013 10:47:44 -0400, Garey Barrell wrote:

>Jim and other 7 experts -
>
>Part of my PS-7 Power Supply repair project included replacing a dead
>500 Hz filter. This resulted in the TR-7 being over on the bench,
>away from it's R-7 buddy. I switched my 'antenna' (I use the term
>loosely) and was listening around the bands after the repairs.
>
>It seemed like the AVC was too FAST for my taste on CW, in fact I was
>unable to tell much difference between FAST and SLOW. So I came back
>to the other desk and tried the TR-7 that was there. SAME!? I then
>switched in the R-7 and found the SLOW / CW AVC much more to my taste.
> Since I normally use the TR-7/R-7 as a 'pair' I hadn't really
>noticed it before.
>
>Looking through the manual (!), I noticed that the t/c for the AVC is
>not specified, BUT that the AVC is 'further tailored' by the MODE
>switch. Sure enough, if I switch the TR-7 to LSB, the slower AVC that
>I like was there!
>
>As I have mentioned before, my operating is almost all CW, 30 - 40
>wpm, and relaxed chatting. I like the slow AVC that quiets down all
>the receiver noise between code elements. Back when I was chasing DX
>and handling traffic, I used QSK and tolerated the noise, but I don't
>need that instant reaction any more and so prefer my slow AVC.
>
>All this is just for background. I haven't looked at the service
>manual yet to see if there is a 'non-invasive' way to change this. I
>know there has been quite a bit of discussion on the list about the
>AVC system, but honestly I haven't paid much attention to it for a
>while. It's not a major concern, as I use the R-7 with its more
>flexible AVC system anyway, just a curiosity.
>
>--
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

13911. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 02:47:06 UTC
From: Jim Shorney
Topic: 4985 Message: 13911

I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have the RV-6, original manual, and the last of the optional filters that Drake had when they were selling out the last of the parts stock. I haven't had it on the air in quite a while, due to lack of space in the current shack configuration.

73

-Jim
NU0C

On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:

>I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13912. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 04:12:13 UTC
From: <w7apm@...>
Topic: 4985 Message: 13912

I have two of the TR-6's but one is going to have to go...

Marty
KL7AM

--- jshorney@inebraska.com wrote:
From: "Jim Shorney" <jshorney@inebraska.com>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] TR-6
Date: Thu, 23 May 2013 21:47:06 -0500

I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA.
Also have
the RV-6, original manual, and the last of the optional filters that
Drake had
when they were selling out the last of the parts stock. I haven't had
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HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13913. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 05:03:59 UTC
From: William Houghton
Topic: 13832 Message: 13913

Hi Garey,

I have the PTO working well. The point of the bend in the slug shaft was right at the threads. I was able to straighten then a little. The movable metal "cam" that is driven by the leadscrew seems to have a lot of play. The cam on mine did not have threads, it was just a hole. It seems that the little plastic disk in the back of the coil is what holds the slug into alignment. The PTO seems to hold calibration well across the full 600kHz of the PTO.

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Tue, May 21, 2013 6:55:38 AM
Subject: Re: [DrakeRadio] my latest TR-4

Bill -

That's typical of a TR-4 with 'used' finals. Output power of 'new' finals reaches these levels in a year or so, depending upon brand, etc. ..... However, once they get to this level they tend to last a LOT longer with reasonable care.

The relative values of those cathode resistors is more important than the absolute value. If you're tired of working on it, add some Ohmite OX ceramic composition resistors, or if you can find 'good' 2W carbon comps, and have them on hand for the next time you're in the mood!! :-) Metal or carbon 'film' resistors are not a good choice, as they don't care for current surges like these see.

Congratulations!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> After alignment I now get:
>
> 80m: 160W at both ends
> 40m: 140W to 160W
> 20m: 150W to 160W
> 15m: 120W to 130W

> 10m: 130W to 140W
>
> with the somewhat high cathode resistors giving slightly more negative
feedback
> than intended. Not knowing the age of the finals I am pleased with these
> results.
>
>
> 73,
>
> Bill
>
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Mon, May 20, 2013 12:32:11 PM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Bill -
>
> OK, that's not bad. Fully aligned with new PA tubes, you should see
> about 200W on 80-20M, 175W on 15M and 150W on 10M.
>
> The Cathode resistors eat into your power somewhat. They need to be
> close to 15 ohms, ideally within 5% of each other. They're there to
> equalize the current through the three tubes. If the voltage across
> one resistor goes up, the Cathode voltage goes up, which makes the
> Grid slightly more negative, which reduces the current throughthat tube.
>
> You'll probably be fine once you get the alignment done. Good luck!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
>> Hi Garey,
>>
>> I measured the output on the ends of the various bands into a dummy load. I'm
>> getting 150W to 160W at some ends. In all cases there is a noticable drop
from
>> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
>> 4.0MHz. I'll have a better feel for it after I align it.

>>
>> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how much
>> that affects the output power.
>>
>> Now to try to bend the PTO's brass tuning rod straight unless someone has a
>> working TR-4 PTO available -hihi.
>>
>> 73,
>>
>> Bill
>>
>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13914. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 10:33:08 UTC
From: john
Topic: 13899 Message: 13914

I've wondered about this too... one of my TR4's (and only this one) has
this issue.
I never determined what allowed it to behave this way while others didn't

John K5MO

At 09:48 PM 5/23/2013, Steve Wedge wrote:
>Might be able to damp it a little with some external R/C components...
>
>Steve Wedge, W1ES/4
>
>Time flies like an arrow; fruit flies like a banana.
>
>
>All my computers have my signature with various pearls of wisdom appended
>thereto.
>
>
>
>From: Richard Knoppow
>Sent: Thursday, May 23, 2013 8:39 PM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] TR-4C PLATE CURRENT METER
>
>
>
>
>
>----- Original Message -----
>From: "Richard Harder" <harderr@...>
>To: <DrakeRadio@yahoogroups.com>
>Sent: Thursday, May 23, 2013 4:05 PM
>Subject: [DrakeRadio] TR-4C PLATE CURRENT METER
>
> > Does the plate current meter movement have internal
> > dampening? I have recently gotten this rig on the air and
> > noticed the plate current meter reminds me of a jalopy
> > having no rear shocks or totally worn out rear shocks. The
> > meter pointer will eventually stabilize as long as nothing
> > is adjusted or there is no applied modulation. The pointer
> > just swings loosy-goosy. The rig is new to me and is my
> > first TR-4C.
> > Any comments are appreciated.
> >
> > 73'
> > Richard

> >
>If its the same meter as on the TR-4, and I think it is,
>its just bouncy. In fact both meters are bouncy. I doubt if
>much can be done about it. Just cheap meters.
>
>--
>Richard Knoppow
>Los Angeles
>WB6KBL
>dickburk@...
>
>
>
>
>
>[Non-text portions of this message have been removed]
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>
>Yahoo! Groups Links
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>
>

13915. 4-Line Crystals Available

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 12:48:45 UTC
From: Steve Wedge
Topic: 13915 Message: 13915

I've got some extra crystals available - listed by xtal frequency, then low end of operating frequency in R-4any or T-4Xany:

35.6 --> 24.5 (12m)
38.1 --> 27.0 (11m)
38.6 --> 27.5 (11m)
39.1 --> 28.0 (10m CW)
40.1 --> 29.0 (10m upper)

All are used and functioning. $20 each, shipped, or less $18 each 2 or more, shipped. Also considering a swap for one of these for a TR-4 15m rock (32.5).

Please contact me off-list...

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13916. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 13:34:34 UTC
From: Garey Barrell
Topic: 13832 Message: 13916

Hi Bill -

Proud of you!! I'm not sure I follow the 'cam' you are referring to. The 'follower', which is the 'fork' threaded onto the lead screw, IS threaded, but it is a very loose fit. The spring from the top of the fork to the hole in the top corner of the shield can is what keeps tension on it. Drake later added a short piece of shield braidsoldered to the fork and to the side wall of the gearbox to ensure a solid ground for the lead screw/ferrite. Originally the ground was through the ball bearings and through the fork sliding along the guide bar at the top of the gearbox. This should NOT be lubricated.

Yes, the phenolic 'plug' at the rear of the slug is what keepsit stable within the coil. It should be a sliding fit, and the plug should be arranged so that it's in a diamond shape rather than a square. This minimizes the surface contact between the two pieces. Also not lubricated.

Always good to bring one back from the brink!!! Congratulations.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> Sent: Tue, May 21, 2013 6:55:38 AM
> Subject: Re: [DrakeRadio] my latest TR-4

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> Bill -
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>
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>> Bill -
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>>> that affects the output power.
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>>> Now to try to bend the PTO's brass tuning rod straight unless someone has a
>>> working TR-4 PTO available -hihi.
>>>

13917. Re: [DrakeRadio] TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 13:48:20 UTC
From: Garey Barrell
Topic: 13899 Message: 13917

John -

I think this is something that needs further investigation. I have seen 'bias' magnets used to accomplish this, and I suspect that a missing or misplaced magnet is what is happening here. It also seems to me that placement of this magnet would affect the linearity and/or sensitivity of the meter as well.

The fact is that these were very inexpensive meters when new, ~$1, so are hardly precision devices. Several have been able to disassemble, switch scales, remove debris, and reassemble. No one has mentioned a bias magnet, but then I don't think anyone is looking! :-)

We know that not ALL of these meters are 'bouncy', while some are. Those old enough to remember the older still EMICO meters used on some of the early Heath and WRL gear, know what a bouncy meter _really_ looks like! Whoever manufactured the Drake meters was able to make just about all of them operatesmoothly and reliably, and I'm guessing they all came out of the factory working properly.

The 2-NT meter was originally a little bouncy, and a change was made to add a 330 uF electrolyticcapacitor across the meter terminals to damp it down.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

john wrote:
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>> Sent: Thursday, May 23, 2013 8:39 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] TR-4C PLATE CURRENT METER
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>> ----- Original Message -----
>> From: "Richard Harder" <harderr@...>
>> To: <DrakeRadio@yahoogroups.com>
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>>> 73'
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>> much can be done about it. Just cheap meters.
>>
>> --
>> Richard Knoppow
>> Los Angeles
>> WB6KBL
>> dickburk@...
>>
>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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> Yahoo! Groups Links
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13918. Re: TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 15:32:06 UTC
From: Richard Harder
Topic: 13899 Message: 13918

Doug,
The S-meter acts exactly as one would expect. I'm going to pull the plate ma. meter, looking at the movement to see if something jumps out, glaringly wrong. If I can find nothing wrong, I may add a small electrolytic across the meter terminals.....although I will only do this as a last resort.....a good friend has a TR-4C, but he's been out of pocket for some time.

Doug, Thanks for your effort!
Best 73,
Richard WA4FUU

--- In DrakeRadio@yahoogroups.com, Doug <dcoffman@...> wrote:
>
> My TR-4 meters are bouncy and my TR-4Cw meters are much more dampened. There is a magnet on top of the movement that dampened it somewhat and also controls the zero of the needle. The coil wires loop out towards the mounting screws and I suspect that they may have some electrical dampening.
>
> Does the S-meter act the same way as the plate current meter?
>
> Doug -N9XTF
>
> Sent from my iPhone
>
> On May 23, 2013, at 19:05, "Richard Harder" <harderr@...> wrote:
>
> > Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
> > Any comments are appreciated.
> >
> > 73'
> > Richard
> >
> >
>
> ---
> PDSWireless
> Quick and Simple Internet Access
> http://www.pdswireless.com
>
> [Non-text portions of this message have been removed]
>

13919. Re: [DrakeRadio] What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 16:19:28 UTC
From: GALE STEWARD
Topic: 13901 Message: 13919

Also, the L4B had a built in watt meter where the L4 had only a relative RF output indicator. The RF decks are identical. I have one of each and my main amp (the L4) puts out 1100W with the stock supply power supply on 80-15M. It's a bit less on 10M. Your tubes might be a bit soft.

73, Stew K3ND

From: Doug <dcoffman@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Cc: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 23, 2013 9:01 PM
Subject: Re: [DrakeRadio] What is the differences between L4 and L4B amps

I own an L-4. The differences I am aware of is the L-4 has the ALC pot on the back of the RF deck instead of the front panel, does not have a standby switch and came with 3-400z instead of 3-500z tubes. As far as I know mine has he original finals and produces 900 watts + - with about 85 watts drive.

For longevity concerns, I rebuilt the power supply about 10 years ago. I have recently replaced the foam seal on the air compartment, oiled the fan and installed two 12VDC fans to move air through the PS. Other than thinking of adding a soft start I don't know what else I would do to it.

One could and have made it legal limit by building a new PS but 900 watts vs 1500 just doesn't seem like a big deal and may push the components closer to their tolerances.

I'm more concerned about finding out if there are any other components that should be changed out due to their age.

Doug -N9XTF

Sent from my iPhone

Sent from my iPhone

On May 23, 2013, at 19:35, "KG0MN" <kg0mn@...> wrote:

> I assume the B model is newer and has many improvements made to it. Can a L4 be made into a B-model without out spending an arm and a leg? Is the L4 a decent amp without any major faults?
>
> Thanks and 73
> Kevin - KG0MN
>
>

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[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

13920. Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 17:37:06 UTC
From: w7jpg
Topic: 13868 Message: 13920

Quick report on some progress:

I decided to disconnect the preselector vernier from the main preselector assembly. My objective was to eliminate one of the possible causes of the completely bound up preselector system.

Fortune smiled as the two set screws securing the preselector shaft coupler to the vernier were positioned so I could get the set screws loose. I was then able to slide the coupler far enough along on the slug rack shaft to free the vernier. I then attached my long shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. This time, with the vernier disconnected, the shaft rotated! Yipee! All slugs appeared to be free and moved through their full range of motion. The system "felt smooth" through the back and forth rotations, maybe a bit stiff but nothing a little exercise wouldn't cure.

Today I will get my hands on that vernier, clean it up, grease it up per prior suggestions, and reinstall it for another test.

More later.

--- In DrakeRadio@yahoogroups.com, "w7jpg" <ckepus@...> wrote:
>
> A R4B followed me home from a local swapmeet. Looked like it would present a challenge but the price was right and I need the practice. Call me a Wedge wannabe.
>
> I am currently preparing a list of observed issues to share with you all. However, I am jumping the gun a bit because of an issue I discovered that may be my Waterloo before I even get my fingers dirty.
>
> After some basic preparation of the radio for power, I brought it up slowly on a variac. No smoke! whew...!
>
> First discovery was that the RF gain control was a replacement and is broken although was usable enough to get some noise. Audio is working, at least to let me hear a hum along with the noise.
>
> I proceeded to see if the receiver would cooperate and hear some signals.
>
> After trying a couple of bands, twisting the preselector control to get some noise peak (no noise peak), I quickly realized the preselector knob was twisting but the entire preselector assembly was not moving so the slugs weren't moving. I tightened the knob and tried again. The knob rotates because the vernier (?) is allowing it to rotate but the shaft on the other side of the vernier is not moving. I hooked up a shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. No rotation. Applied enough torque to realize the shaft wasn't going to twist. Surprising that the two dial cord assemblies could resist the torque and not slip even if a slug was frozen.
>

> Looked at the slug rack assembly and compared it to a healthy R-4B sittin them "side by side". The entire slug rack assembly of the swapmeet R4B appears to be "tilted" by a couple of degrees to the rear compared to being squared up with the chassis as the healthy R4B.
>
> Each of the slug adjustment screws for T-1 through T-4 on the swapmeet R4B is corroded (rusted) at the point where they pass through the adjustment nut. A couple of the adj. screws are slightly bent above the nut. (appears to be a common affliction as one is slightly bent on the healthy R4B.
>
> I have searched without success for any posts in this list(and elsewhere) that discuss this particular problem.
>
> I am assuming that the entire slug rack mechanism could be frozen up if any one (or more than one) of the four slugs are frozen. Fair assumption? Or is it unlikely the slugs are frozen?
>
> After RTFCD service manual, operation manual, etc., I found nothing on disassembling the preselector assembly. Tt looks doable but daunting, especially in light of the rust encapsulating the slug adjustment screws.
>
> Am I the proud owner of a parts rig or is there someone that has conquered this problem and can share their successful R & R technique?
>
> All responses will be appreciated.
>
> 73, Chris W7JPG
>

13921. Re: [DrakeRadio] Re: TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 15:59:45 UTC
From: Doug
Topic: 13899 Message: 13921

Some time back, I posted some pics of the meter disassembled and their components. You might give it a look.

Sent from my iPhone

On May 24, 2013, at 11:32, "Richard Harder" <harderr@...> wrote:

> Doug,
> The S-meter acts exactly as one would expect. I'm going to pull the plate ma. meter, looking at the movement to see if something jumps out, glaringly wrong. If I can find nothing wrong, I may add a small electrolytic across the meter terminals......although I will only do this as a last resort.....a good friend has a TR-4C, but he's been out of pocket for some time.
>
> Doug, Thanks for your effort!
> Best 73,
> Richard WA4FUU
>
> --- In DrakeRadio@yahoogroups.com, Doug <dcoffman@...> wrote:
> >
> > My TR-4 meters are bouncy and my TR-4Cw meters are much more dampened. There is a magnet on top of the movement that dampened it somewhat and also controls the zero of the needle. The coil wires loop out towards the mounting screws and I suspect that they may have some electrical dampening.
> >
> > Does the S-meter act the same way as the plate current meter?
> >
> > Doug -N9XTF
> >
> > Sent from my iPhone
> >
> > On May 23, 2013, at 19:05, "Richard Harder" <harderr@...> wrote:
> >
> > > Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
> > > Any comments are appreciated.
> > >
> > > 73'
> > > Richard
> > >
> > >
> >
> > ---

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> > http://www.pdswireless.com
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> > [Non-text portions of this message have been removed]
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Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

13922. L-4 Amplifier Maintenance

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 18:20:21 UTC
From: slowcountry1
Topic: 13871 Message: 13922

As I have completed my TR-4 and TR-4Cw projects, I am turning my attention to my beloved L-4 amplifier. About 8 years ago, I rebuilt the power supply with new capacitors, upgraded diodes and bleeder resistors. I have recently replaced the foam seal material in the bottom of the case and added fans to move air through the power supply.

Are there any other components that should be replaced or given attention? I am running, what I assume to be, the original 3-400 1968 date code tubes; full output appears at 900 watts.

As a side note, I do not have any type of soft start for the amp. I do not use the power switch on the amp, I use the 220V breaker in the panel for turning the amp on and off.

Thanks,

Doug - N9XTF

13923. Re: [DrakeRadio] Re: TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 20:11:44 UTC
From: Garey Barrell
Topic: 13899 Message: 13923

Doug -

I must have missed those. Nice photos!

I assume the large bolt under the pointer was to hold the pointer to
full scale?

I just uploaded photos of the interior of a square plate meter. I was
unable to see any sort of bias magnet, but I was unable to disassemble
it any further. My hands are just not steady enough for this kind of
work any more!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug wrote:
> Some time back, I posted some pics of the meter disassembled and their components. You might give it a look.
>
> Sent from my iPhone
>
> On May 24, 2013, at 11:32, "Richard Harder" <harderr@...> wrote:
>
>> Doug,
>> The S-meter acts exactly as one would expect. I'm going to pull the plate ma. meter, looking at the movement to see if something jumps out, glaringly wrong. If I can find nothing wrong, I may add a small electrolytic across the meter terminals......although I will only do this as a last resort.....a good friend has a TR-4C, but he's been out of pocket for some time.
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>> Doug, Thanks for your effort!
>> Best 73,
>> Richard WA4FUU
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>> --- In DrakeRadio@yahoogroups.com, Doug <dcoffman@...> wrote:
>>> My TR-4 meters are bouncy and my TR-4Cw meters are much more dampened. There is a magnet on top of the movement that dampened it somewhat and also controls the zero of the needle. The coil wires loop out towards the mounting screws and I suspect that they may have some electrical dampening.
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>>> Does the S-meter act the same way as the plate current meter?
>>>

>>> Doug -N9XTF
>>>
>>> Sent from my iPhone
>>>
>>> On May 23, 2013, at 19:05, "Richard Harder" <harderr@...> wrote:
>>>
>>>> Does the plate current meter movement have internal dampening? I have recently gotten this rig on the air and noticed the plate current meter reminds me of a jalopy having no rear shocks or totally worn out rear shocks. The meter pointer will eventually stabilize as long as nothing is adjusted or there is no applied modulation. The pointer just swings loosy-goosy. The rig is new to me and is my first TR-4C.
>>>> Any comments are appreciated.
>>>>
>>>> 73'
>>>> Richard
>>>>

13924. Re: [DrakeRadio] Re: R4B challenge

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 20:43:51 UTC
From: Steve Wedge
Topic: 13868 Message: 13924

Hey, Chris -

Yeah, I've never heard of slugs getting frozen in those coils. They're pretty loose in there (relative to machined fittings...).

You probably have an issue with the input shaft to the coupler. I've never heard of one frozen up before, but there's a first time for everything. You can attach shafts to this coupler outside the radio and can watch how it's supposed to work, once you get it properly lubed.

It's fascinating, actually.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w7jpg
Sent: Friday, May 24, 2013 1:37 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R4B challenge

Quick report on some progress:

I decided to disconnect the preselector vernier from the main preselector assembly. My objective was to eliminate one of the possible causes of the completely bound up preselector system.

Fortune smiled as the two set screws securing the preselector shaft coupler to the vernier were positioned so I could get the set screws loose. I was then able to slide the coupler far enough along on the slug rack shaft to free the vernier. I then attached my long shaft extension to the rear of the preselector shaft, put a knob on it and gave it some torque. This time, with the vernier disconnected, the shaft rotated! Yipee! All slugs appeared to be free and moved through their full range of motion. The system "felt smooth" through the back and forth rotations, maybe a bit stiff but nothing a little exercise wouldn't cure.

Today I will get my hands on that vernier, clean it up, grease it up per prior suggestions, and reinstall it for another test.

More later.

--- In DrakeRadio@yahoogroups.com, "w7jpg" <ckepus@...> wrote:
>
> A R4B followed me home from a local swapmeet. Looked like it would present a challenge but the price was right and I need the practice. Call me a Wedge wannabe.
>
> I am currently preparing a list of observed issues to share with you all. However, I am

jumping the gun a bit because of an issue I discovered that may be my Waterloo before I even get my fingers dirty.
>
> After some basic preparation of the radio for power, I brought it up slowly on a variac. No smoke! whew...!
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> First discovery was that the RF gain control was a replacement and is broken although was usable enough to get some noise. Audio is working, at least to let me hear a hum along with the noise.
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> I proceeded to see if the receiver would cooperate and hear some signals.
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> Looked at the slug rack assembly and compared it to a healthy R-4B sittin them "side by side". The entire slug rack assembly of the swapmeet R4B appears to be "tilted" by a couple of degrees to the rear compared to being squared up with the chassis as the healthy R4B.
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> Each of the slug adjustment screws for T-1 through T-4 on the swapmeet R4B is corroded (rusted) at the point where they pass through the adjustment nut. A couple of the adj. screws are slightly bent above the nut. (appears to be a common affliction as one is slightly bent on the healthy R4B.
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> I have searched without success for any posts in this list(and elsewhere) that discuss this particular problem.
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> I am assuming that the entire slug rack mechanism could be frozen up if any one (or more than one) of the four slugs are frozen. Fair assumption? Or is it unlikely the slugs are frozen?
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> After RTFCD service manual, operation manual, etc., I found nothing on disassembling the preselector assembly. Tt looks doable but daunting, especially in light of the rust encapsulating the slug adjustment screws.
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> Am I the proud owner of a parts rig or is there someone that has conquered this problem and can share their successful R & R technique?
>
> All responses will be appreciated.
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> 73, Chris W7JPG
>

[Non-text portions of this message have been removed]

13925. Tooting my Horn...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-24 23:06:51 UTC
From: Steve Wedge
Topic: 13925 Message: 13925

Yeah, I'm an upstart. Groucho slapped his opponent after being called this.

I know there are a lot of people who have been to Dayton and have bought gear there in the heat of passion. If you bought Drake gear there that needs some work, I can help.

I know there are a lot of guys and gals out there who work on Drake gear and I want to put my name into the list of possible folks who work on this gear. I truly love these radios and have a connection dating back to 1983, when I owned my first R-4A that I used as my receiver in conjunction with my Swan 500. I am very familiar with the Twins and know how Drake built their gear. I would be honored if you'd consider me to help you bring your Drake gear up to spec or if you asked me to bring it to life from a dead radio.

I am of the "wash it" school. Tube gear can be washed with plain ol' detergent and water! I used distilled water for the final rinse and I have never lost a radio to this method: in fact, Tektronix used this method for decades - which is where I learned it. You'd be amazed at how good your rig will look after a good, thorough washing! I do not immerse nor use a dishwasher.

Please email me if you're interested. I'm trying to establish myself and as I get more work, I can get more services (like painting) lined-up.

73,

Steve Wedge, W1ES/4
Black Radios

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13926. RE: [DrakeRadio] Re: TR-4C PLATE CURRENT METER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 00:25:50 UTC
From: Doug Coffman
Topic: 13899 Message: 13926

Garey,

It took me a minute to figure out what you were asking; good grief I must be getting tired.

The brass screw, just under the meter movement is one of two screws that goes vertically through the meter to hold the top clear plastic cover on the bottom clear plastic body. It just happened to fall into bottom of the meter prior to the picture; it was not placed there on purpose. Luckily they use screws so that one can easily open them up. The problem is that if you don't expect the fine enamel wire to loop out towards the screws holding the green coil board down, they break very easily.

I was never able to determine why this meter movement started acting like it was on a spring. The magnet worked just fine and the wiring appeared just like the one I replaced it with. I replaced it with another and it was dampened again. I have absolutely no idea; I tried a little bit of mechanical dampening but that made the meter too stiff. Therefore, it sits in my junk box in the event I need to scavenge some parts from it.

Regards,

Doug N9XTF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Friday, May 24, 2013 4:12 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: TR-4C PLATE CURRENT METER

Doug -

I must have missed those. Nice photos!

I assume the large bolt under the pointer was to hold the pointer to
full scale?

I just uploaded photos of the interior of a square plate meter. I was
unable to see any sort of bias magnet, but I was unable to disassemble
it any further. My hands are just not steady enough for this kind of
work any more!

73, Garey - K4OAH
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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Doug wrote:
> Some time back, I posted some pics of the meter disassembled and their components. You

might give it a look.
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> Sent from my iPhone
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> On May 24, 2013, at 11:32, "Richard Harder" <harderr@...
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>
>> Doug,
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>>> My TR-4 meters are bouncy and my TR-4Cw meters are much more dampened. There is a magnet on top of the movement that dampened it somewhat and also controls the zero of the needle. The coil wires loop out towards the mounting screws and I suspect that they may have some electrical dampening.
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>>>> Any comments are appreciated.
>>>>
>>>> 73'
>>>> Richard
>>>>

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http://www.pdswireless.com

[Non-text portions of this message have been removed]

13927. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 00:28:03 UTC
From: VE3AX/7
Topic: 4985 Message: 13927

Jim:

Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not – wonder if it's somewhere else on the chassis? Maybe have to pull from the cabinet to see.

Anyone know how many RV-6's were made? Have heard 60 or so but hard to believe it's that low.

How about TC-2's and TC-6's? Think the highest serial # I've seen on those is just on the high side of 300. Highest TC-2 on Ron's site is below 300 – no TC-6's listed.

My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken "bandswitch" wafer in it once though – not a fun job.

73
Peter
VE3AX/7

From: Jim Shorney
Sent: Thursday, May 23, 2013 7:47 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-6

I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have the RV-6, original manual, and the last of the optional filters that Drake had when they were selling out the last of the parts stock. I haven't had it on the air in quite a while, due to lack of space in the current shack configuration.

73

-Jim
NU0C

On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:

>I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

13928. Re: What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 00:39:46 UTC
From: slowcountry1
Topic: 13901 Message: 13928

Stew,

What plate voltage is indicated on your L-4 no load? I have not seen a reference to what it should be. My meter indicates almost 3KV. I do not have access to a high voltage probe anymore; I would love to know if this is accurate. I ran a dedicated 220VAC line to my shack and if memory serves, its about 235 or 240VAC. If the taps are supposed to be 220VAC, the line increase would explain a little elevation on the plate voltage.

Do you follow the tuning procedure in the manual to .585 IP and 220 IG? It seems as if Drake instructed the operator to tune so those values were present on CW/TUNE as an absolute requirement. I tune for maximum power which in turn results in lowest IG. It seems that I've read several places that one should run the lowest IG. I advance the loading cap a little past maximum output power to load a little more heavily. On a whistle in SSB setting I derive somewhere just under 700ma IP and 160 IG. If the plate voltage were correct this would yield like (2900*.700)*.65 = 1395 watts output. Therefore, either my plate voltage is not what is indicated or my W4 and MN-2000 are out of calibration. I try to run the set around 600 -700 watts when I use the amp.

Your thoughts?

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, GALE STEWARD <k3nd@...> wrote:
>
> Also, the L4B had a built in watt meter where the L4 had only a relative RF output indicator. The RF decks are identical. I have one of each and my main amp (the L4) puts out 1100W with the stock supply power supply on 80-15M. It's a bit less on 10M. Your tubes might be a bit soft.
>
> 73, Stew K3ND
>
>
>
>
>
> _____
> From: Doug <dcoffman@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Cc: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Thursday, May 23, 2013 9:01 PM
> Subject: Re: [DrakeRadio] What is the differences between L4 and L4B amps
>
>
>
> I own an L-4. The differences I am aware of is the L-4 has the ALC pot on the back of the

RF deck instead of the front panel, does not have a standby switch and came with 3-400z instead of 3-500z tubes. As far as I know mine has he original finals and produces 900 watts + - with about 85 watts drive.
>
> For longevity concerns, I rebuilt the power supply about 10 years ago. I have recently replaced the foam seal on the air compartment, oiled the fan and installed two 12VDC fans to move air through the PS. Other than thinking of adding a soft start I don't know what else I would do to it.
>
> One could and have made it legal limit by building a new PS but 900 watts vs 1500 just doesn't seem like a big deal and may push the components closer to their tolerances.
>
> I'm more concerned about finding out if there are any other components that should be changed out due to their age.
>
> Doug -N9XTF
>
> Sent from my iPhone
>
> Sent from my iPhone
>
> On May 23, 2013, at 19:35, "KG0MN" <kg0mn@...> wrote:
>
> > I assume the B model is newer and has many improvements made to it. Can a L4 be made into a B-model without out spending an arm and a leg? Is the L4 a decent amp without any major faults?
> >
> > Thanks and 73
> > Kevin - KG0MN
> >
> >
>
> ---
> PDSWireless
> Quick and Simple Internet Access
> http://www.pdswireless.com
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
>

13929. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 01:56:07 UTC
From: Garey Barrell
Topic: 4985 Message: 13929

Peter -

I've never had an RV-6, but the RV-4/Cs that I have seen have had the s/n stamped just to the right of the grounding bolt on the rear lip of the chassis.

I don't have any official numbers, but I wouldn't be surprised if there were that few RV-6s made. Not a lot of call for 'split' operation on 6M.

My TC-6 is s/n 0132, and the TC-2 is s/n 0328. My guess would be <250 and <500 respectively. My CC-1 is s/n 502.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Jim:
>
> Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not – wonder if it’s somewhere else on the chassis? Maybe have to pull from the cabinet to see.
>
> Anyone know how many RV-6’s were made? Have heard 60 or so but hard to believe it’s that low.
>
> How about TC-2’s and TC-6’s? Think the highest serial # I’ve seen on those is just on the high side of 300. Highest TC-2 on Ron’s site is below 300 – no TC-6’s listed.
>
> My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken “bandswitch” wafer in it once though – not a fun job.
>
> 73
> Peter
> VE3AX/7
>
> From: Jim Shorney
> Sent: Thursday, May 23, 2013 7:47 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TR-6
>
>
>

> I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
> the RV-6, original manual, and the last of the optional filters that Drake had
> when they were selling out the last of the parts stock. I haven't had it on the
> air in quite a while, due to lack of space in the current shack configuration.
>
> 73
>
> -Jim
> NU0C
>
> On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:
>
>> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
>

13930. Re: TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 02:03:22 UTC
From: de_n7ioh
Topic: 4985 Message: 13930

Peter, my RV-6 has the serial number where Garey said, to the right of the ground screw. My serial number is, 065.

Al, n7ioh
Payson, Arizona, USA

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Peter -
>
> I've never had an RV-6, but the RV-4/Cs that I have seen have had the
> s/n stamped just to the right of the grounding bolt on the rear lip of
> the chassis.
>
> I don't have any official numbers, but I wouldn't be surprised if
> there were that few RV-6s made. Not a lot of call for 'split'
> operation on 6M.
>
> My TC-6 is s/n 0132, and the TC-2 is s/n 0328. My guess would be
> <250 and <500 respectively. My CC-1 is s/n 502.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
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> VE3AX/7 wrote:
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> > Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not â□" wonder if itâ□□s somewhere else on the chassis? Maybe have to pull from the cabinet to see.
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> > Anyone know how many RV-6â□□s were made? Have heard 60 or so but hard to believe itâ□□s that low.
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> > My TR-6 is an early one at #086. Works fine and is loaded â□" had to replace a broken â□□bandswitchâ□□ wafer in it once though â□" not a fun job.
> >
> > 73
> > Peter
> > VE3AX/7

> >
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> > Sent: Thursday, May 23, 2013 7:47 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] TR-6
> >
> >
> >
> > I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
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> >
> >
>

13931. Re: [DrakeRadio] Re: What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 02:18:10 UTC
From: Garey Barrell
Topic: 13901 Message: 13931

Doug -

Absent a HV meter (Triplett 630-NA or similar), your best bet is accurate ohmmeter readings ofthe 1 Meg resistors and the 100k of the meter voltage divider and then calculate the voltage.

The 0.585 A and 220 mA were specified as that was the power limitat the time, i.e., 1000 Watts INPUT. 1750 VDC x 0.585 mA = 1023 W INPUT. There is a graph in the manual of EP vs IP for 1000W INPUT. This limit was set before most hams had reasonably accurate Wattmeters. By the time the next limits were set by theFCC, most DID have wattmeters and so the limit was set to 1500 W CW or PEP, OUTPUT.

The line voltage is specified at 230 VAC, or twice the nominal 115 VAC +/- 10V.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

slowcountry1 wrote:
> Stew,
>
> What plate voltage is indicated on your L-4 no load? I have not seen a reference to what it should be. My meter indicates almost 3KV. I do not have access to a high voltage probe anymore; I would love to know if this is accurate. I ran a dedicated 220VAC line to my shack and if memory serves, its about 235 or 240VAC. If the taps are supposed to be 220VAC, the line increase would explain a little elevation on the plate voltage.
>
> Do you follow the tuning procedure in the manual to .585 IP and 220 IG? It seems as if Drake instructed the operator to tune so those values were present on CW/TUNE as an absolute requirement. I tune for maximum power which in turn results in lowest IG. It seems that I've read several places that one should run the lowest IG. I advance the loading cap a little past maximum output power to load a little more heavily. On a whistle in SSB setting I derive somewhere just under 700ma IP and 160 IG. If the plate voltage were correct this would yield like (2900*.700)*.65 = 1395 watts output. Therefore, either my plate voltage is not what is indicated or my W4 and MN-2000 are out of calibration. I try to run the set around 600 -700 watts when I use the amp.
>
> Your thoughts?
>
> Regards,
>

> Doug N9XTF
>
>

13932. Re: [DrakeRadio] Re: What is the differences between L4 and L4B amps

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 02:30:16 UTC
From: GALE STEWARD
Topic: 13901 Message: 13932

Plate V is about 2700 no load and about 2400 under load (key down). Power out in this condition is about 1150W on 40M.

Don't worry too much about actual numbers. I just tune mine for maximum output. I normally drive it with a TS-850S (100W).

Working the WPX contest right now on 40M with it.

73, Stew K3ND

From: slowcountry1 <dcoffman@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, May 24, 2013 8:39 PM
Subject: [DrakeRadio] Re: What is the differences between L4 and L4B amps

Stew,

What plate voltage is indicated on your L-4 no load? I have not seen a reference to what it should be. My meter indicates almost 3KV. I do not have access to a high voltage probe anymore; I would love to know if this is accurate. I ran a dedicated 220VAC line to my shack and if memory serves, its about 235 or 240VAC. If the taps are supposed to be 220VAC, the line increase would explain a little elevation on the plate voltage.

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Your thoughts?

Regards,

Doug N9XTF

--- In DrakeRadio@yahoogroups.com, GALE STEWARD <k3nd@...> wrote:
>
> Also, the L4B had a built in watt meter where the L4 had only a relative RF output indicator. The RF decks are identical. I have one of each and my main amp (the L4) puts out 1100W with the stock supply power supply on 80-15M. It's a bit less on 10M. Your tubes might be a bit soft.
>
> 73, Stew K3ND

>
>
>
>
>
> _____
> From: Doug <dcoffman@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Cc: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Thursday, May 23, 2013 9:01 PM
> Subject: Re: [DrakeRadio] What is the differences between L4 and L4B amps
>
>
> I own an L-4. The differences I am aware of is the L-4 has the ALC pot on the back of the RF deck instead of the front panel, does not have a standby switch and came with 3-400z instead of 3-500z tubes. As far as I know mine has he original finals and produces 900 watts + - with about 85 watts drive.
>
> For longevity concerns, I rebuilt the power supply about 10 years ago. I have recently replaced the foam seal on the air compartment, oiled the fan and installed two 12VDC fans to move air through the PS. Other than thinking of adding a soft start I don't know what else I would do to it.
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> Yahoo! Groups Links
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Yahoo! Groups Links

[Non-text portions of this message have been removed]

13933. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 05:48:59 UTC
From: VE3AX/7
Topic: 4985 Message: 13933

Garey/Al;

Aha! Thanks guys. Found it! Serial #0132, so guess there were more than 60 RV-6's made. I was looking for a serial # font typical of that used on the 4-line but this is half-sized or less, but is the same font as used on at least one of my RV-4's. Just happened that the insulated terminal on the ground wire was covering it up.

Garey – given your history in the ham radio sales & marketing world, any idea what the 3rd expansion slot in the CC-1 was meant for? 220 Mhz? 432 Mhz? Homebrew converter? My CC-1 has a commercially made (non-Drake) aftermarket noise blanker that is operated from the front panel switches for that 3rd converter. Maybe Bill Frost could answer that one?

One other question while we are on the subject of the Drake VHF stuff...has anyone ever tried a 5894 in place of the 8643 in the TC-2? They are pretty close in specs with the 8643 maybe being a little more dissipation/output, but they are a LOT harder to find, I have no spares, and do have near a drawer full of brand new 5894's. Maybe only one way to find out! No need to yet...but would be good to know.

73

Peter
VE3AX/7

From: Garey Barrell
Sent: Friday, May 24, 2013 6:56 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-6

Peter -

I've never had an RV-6, but the RV-4/Cs that I have seen have had the
s/n stamped just to the right of the grounding bolt on the rear lip of
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73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Jim:
>
> Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not – wonder if it's somewhere else on the chassis? Maybe have to pull from the cabinet to see.
>
> Anyone know how many RV-6's were made? Have heard 60 or so but hard to believe it's that low.
>
> How about TC-2's and TC-6's? Think the highest serial # I've seen on those is just on the high side of 300. Highest TC-2 on Ron's site is below 300 – no TC-6's listed.
>
> My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken "bandswitch" wafer in it once though – not a fun job.
>
> 73
> Peter
> VE3AX/7
>
> From: Jim Shorney
> Sent: Thursday, May 23, 2013 7:47 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: Re: [DrakeRadio] TR-6
>
>
>
> I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
> the RV-6, original manual, and the last of the optional filters that Drake had
> when they were selling out the last of the parts stock. I haven't had it on the
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>
> 73
>
> -Jim
> NU0C
>
> On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:
>
>> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
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> Ham Radio NU0C
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>
>

[Non-text portions of this message have been removed]

13934. TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 07:04:36 UTC
From: Richard Knoppow
Topic: 13934 Message: 13934

I got curious so I opened up my TR-4 and tested the meters to see if a dead short across them would damp them. It did not. I am puzzled by this. A meter is a motor and like any motor generates a back EMF. Normally, if you short the terminals of a meter the pointer moves only very sluggishly. In fact, its standard practice to short the terminals when shipping meters. All I can think is that these are not very sensitive meters. I did not want to disconnect them to measure the DC resistance but that would be a clue.
Its possible to damp a meter by means of an eddy current turn, these meters do not appear to have one.
BTW, I discovered the Receive/Transceive switch on the side is broken. I will have to track down a replacement.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13935. TR-4 or MN-4 knob needed

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 07:37:02 UTC
From: William Houghton
Topic: 13935 Message: 13935

Hi all,

I need the REL OUTPUT knob for a TR-4. This is the same knob used the set the SWR on an MN-4. Anyone have an extra or know where I can find one?

Thanks & 73,

Bill, WA6NEQ

[Non-text portions of this message have been removed]

13936. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 07:44:15 UTC
From: William Houghton
Topic: 13934 Message: 13936

Richard,

Shouldn't be too hard to find a slide switch. If you have trouble, let me know. There is a surplus store here that usually has a large inventory of slide switches.

73,

Bill

From: Richard Knoppow <1oldlens1@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 25, 2013 12:04:41 AM
Subject: [DrakeRadio] TR-4 bouncing meters

I got curious so I opened up my TR-4 and tested the meters to see if a dead short across them would damp them. It did not. I am puzzled by this. A meter is a motor and like any motor generates a back EMF. Normally, if you short the terminals of a meter the pointer moves only very sluggishly. In fact, its standard practice to short the terminals when shipping meters. All I can think is that these are not very sensitive meters. I did not want to disconnect them to measure the DC resistance but that would be a clue.
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--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

ichard,

[Non-text portions of this message have been removed]

13937. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 12:45:00 UTC
From: Doug
Topic: 13934 Message: 13937

I believe that is why they have the "U" loop of wire.

Sent from my iPhone

On May 25, 2013, at 3:04, "Richard Knoppow" <1oldlens1@...> wrote:

> I got curious so I opened up my TR-4 and tested the
> meters to see if a dead short across them would damp them.
> It did not. I am puzzled by this. A meter is a motor and
> like any motor generates a back EMF. Normally, if you short
> the terminals of a meter the pointer moves only very
> sluggishly. In fact, its standard practice to short the
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> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

13938. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 14:06:52 UTC
From: Garey Barrell
Topic: 4985 Message: 13938

Peter -

OK. I suspect that was a VERY late RV-6, I still don't see much demand for split operation on 6M!! Not like you have to deal with pileups that often. :-)

I don't know of any option from Drake ever being made available for that third slot. As I recall the advertisement said something like 'a third slot for another band of your choosing'. Interesting to find a Noise Blanker in there. What was it? Where was it applied? Separate antenna like Collins used?

Bill may have other info on that third slot, but I have found his 'hard drive' full to overflowing just keeping up with what they DID do!! :-) Just as an example, he had no recollection of the color coded crystals for the Late A and B Lines!! I keep forgetting that in spite of his outstanding cooperation and patience with goofballs like me(who even CARES about color coded crystals 50 years later), this was his daily JOB. I remember quite a bit of what I did at NASA and NRAO, but there's a LOT I doNOT remember at all!! :-)

Dunno about the 5894. It's slightly taller, and considerable lower interelectrode capacitances (it's rated to 500 MHz v 175 for the 8643) but looks like it 'should' work. Apparently the 8643 was a Motorola special tube designed for mobile use, and was only used in one model! How Drake ever found it is amazing. I bought one spare for $40 about 10 years ago from a tube dealer at the Shelby hamfest. It was in a Motorola box and he said that was all he'd ever seen. There's probably a hundred of them in all that mobile FM commercial trash that shows up at every hamfest, if we only knew which one!! :-) I guess I would just keep my eyes open for a spare, and if yours should fail, try a 5894. I'd bet it will either work or could be MADE to work without much effort.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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VE3AX/7 wrote:
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> Peter
> VE3AX/7
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> From: Garey Barrell
> Sent: Friday, May 24, 2013 6:56 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TR-6
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>> Anyone know how many RV-6's were made? Have heard 60 or so but hard to believe it's that low.
>>
>> How about TC-2's and TC-6's? Think the highest serial # I've seen on those is just on the high side of 300. Highest TC-2 on Ron's site is below 300 – no TC-6's listed.
>>
>> My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken "bandswitch" wafer in it once though – not a fun job.
>>
>> 73
>> Peter
>> VE3AX/7
>>
>> From: Jim Shorney
>> Sent: Thursday, May 23, 2013 7:47 PM
>> To: mailto:DrakeRadio%40yahoogroups.com
>> Subject: Re: [DrakeRadio] TR-6
>>
>>
>>
>> I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
>> the RV-6, original manual, and the last of the optional filters that Drake had
>> when they were selling out the last of the parts stock. I haven't had it on the
>> air in quite a while, due to lack of space in the current shack configuration.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>> On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:
>>
>>> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
>> --
>> Ham Radio NU0C
>> Lincoln, Nebraska, U.S.S.A.
>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>>
>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13939. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 14:11:34 UTC
From: Barry
Topic: 13934 Message: 13939

If it's a DPDT, Radio Shack sells those.

Barry - N4BUQ

Sent from my iPad

On May 25, 2013, at 2:44 AM, William Houghton <rdrbill@...> wrote:

> Richard,
>
> Shouldn't be too hard to find a slide switch. If you have trouble, let me know.
> There is a surplus store here that usually has a large inventory of slide
> switches.
>
> 73,
>
> Bill
>
>
> _____
> From: Richard Knoppow <1oldlens1@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, May 25, 2013 12:04:41 AM
> Subject: [DrakeRadio] TR-4 bouncing meters
>
>
> I got curious so I opened up my TR-4 and tested the
> meters to see if a dead short across them would damp them.
> It did not. I am puzzled by this. A meter is a motor and
> like any motor generates a back EMF. Normally, if you short
> the terminals of a meter the pointer moves only very
> sluggishly. In fact, its standard practice to short the
> terminals when shipping meters. All I can think is that
> these are not very sensitive meters. I did not want to
> disconnect them to measure the DC resistance but that would
> be a clue.
> Its possible to damp a meter by means of an eddy
> current turn, these meters do not appear to have one.
> BTW, I discovered the Receive/Transceive switch on the
> side is broken. I will have to track down a replacement.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...

>
>
>
> ichard,
>
> [Non-text portions of this message have been removed]
>
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> ------------------------------------
>
> Yahoo! Groups Links
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>

13940. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 14:39:54 UTC
From: Garey Barrell
Topic: 13934 Message: 13940

Richard -

The square 4-Line meters are all ~3 mA fs and 440 ohms. I say 'about' 3 mA as I have found them anywhere from 2.9 to 3.1 mA, with most on the low side.

I just checked the one I disassembled yesterday, (yes, it still works! :-) ,) and a short across the terminals definitelydamps the oscillations caused by rapid wrist movement. Itbounces from 1/3 to 1/2 full scale 'open', and at most about 5% when shorted. So Maxwell was correct!!

Comparing the photos, both appear to be moving magnet style meters of similar design. The small plate that appears to be the rear pivot point in interesting in that it is fastened by a couple of rivets, indicating some sort of production adjustment. I wonder if instead of a pivot point it is actually magnetic and used to either zero or perhaps damp the movement, or both, by it's placement. While disassembling this one, I noticed that bringing a steel screwdriver (NOT magnetized) near the movement could affect the position of the pointer by a considerable amount.

A shorted turn in the coil would definitely damp any magnetic field, (perhaps what you are calling an 'eddy turn'?)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> I got curious so I opened up my TR-4 and tested the
> meters to see if a dead short across them would damp them.
> It did not. I am puzzled by this. A meter is a motor and
> like any motor generates a back EMF. Normally, if you short
> the terminals of a meter the pointer moves only very
> sluggishly. In fact, its standard practice to short the
> terminals when shipping meters. All I can think is that
> these are not very sensitive meters. I did not want to
> disconnect them to measure the DC resistance but that would
> be a clue.
> Its possible to damp a meter by means of an eddy
> current turn, these meters do not appear to have one.
> BTW, I discovered the Receive/Transceive switch on the
> side is broken. I will have to track down a replacement.

>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>

13941. R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 17:09:16 UTC
From: Steve Wedge
Topic: 13941 Message: 13941

Yes, it was C126. The S-meter is now also much more sensitive than it was, too.

I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!

I'll have spares, anyway.

It's sitting in place of my station R-4B and now I have a tough decision to make.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13942. R-4B FS

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 17:12:44 UTC
From: Steve Wedge
Topic: 13942 Message: 13942

I'm burning in my "new" R-4B at the station receiver position. I now have to sell one of them.

I'm pretty sure I'll be keeping this one I just did and selling my station receiver. The station receiver has all NOS tubes except for the 6HS6's and 6EH5 - which were tested fine. Has the full Hayseed Hamfest recap (all electrolytics have been changed). 8.5/10 cosmetically with the front panel and cabinet. though the silkscreen's gone from the lower cabinet. Chassis was stripped and cleaned two years ago and a large corrosion spot near the PTO was touched up with copper paint. PTO and all other lubrication spots have been addressed. The rest of the chassis is nice.

I'll be putting it up for auction if no-one here's interested first.
Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13943. Are There Any Demonstration Videos of Sherwood Upgrades?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 17:27:30 UTC
From: marrer_enterprises
Topic: 13943 Message: 13943

I've looked around and cannot find much of anything anywhere.

Are there any videos online that show a stock R-4C side by side with another receiver containing each of the various Sherwood mods so that a person can get a better idea of the improvements that are available? It would be nice if a person could see - and hear - for themselves to determine which are really needed based on the way they use their receivers.

For example, they offer many versions of SSB roofing filters, but what exactly does each offer in the way of cleaning up the signals? Tech specs are nice, but would be even better to hear a demonstration in a real world situation.

13944. Re: [DrakeRadio] Are There Any Demonstration Videos of Sherwood Upgrades?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 17:54:16 UTC
From: Garey Barrell
Topic: 13943 Message: 13944

I don't know of any. Would be a good project for a Sherwood fan.

The idea of the 'roofing' filter is to get the most filtering as close to the antenna as possible. The 600 Hzroofing filter is obviously for CW or data modes. It greatly restricts the Passband Tuner range, and effectively kills the Noise Blanker. But for receiving CW in impossible conditions it's hard to beat with anything on the market. Of course unless provisions are made for switching it out, leaving the 8 kHz 'stock' filter,or relay selection of the 2.2 kHz(?) SSB filter, it makes the 'C' a CW only receiver. Even with the SSB filter the Passband Tuner is still pretty irrelevant. The filter width is purely a tradeoff of fidelity vs readability. You can read SSB with a 500 Hz filter by manipulation the Passband Tuner to pick out the midrange tones that carry 80% or more of the intelligibility, but it doesn't sound very good. On the other hand, a 4-6 kHz filter gives great fidelity even on an SSB signal, _unless_ there is another station 3 kHz away!

The 3rd IF/Product Detector mod eliminates the noisy 6EJ7 and provides a much cleaner (lower distortion) PD, using I think the MC1496? which is what is used in the R-7 and later TR-7s. The AF output is much more efficient than the Class A original, greatly reducing the load on the power supply.

The Power Supply is also more efficient, using 3 terminal regulator ICs. Combined with the reduced AF PA stages the overall heat in the receiver is reduced.

There may be more, but that's all I can think of. My opinion is if you need the best CW receiver for contest or DX operation, especially on the low bands, you probably cannot buy a better receiver. The SSB function is also improved under those conditions, just becausethe filtering is that much closer to the antenna. In either event you give up the NB and most of the Passband Tuner functionality.

For day to day hamming on today's uncrowded bands, I still prefer the B-Line! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

marrer_enterprises wrote:
> I've looked around and cannot find much of anything anywhere.
>
> Are there any videos online that show a stock R-4C side by side with another receiver containing each of the various Sherwood mods so that a person can get a better idea of the improvements that are available? It would be nice if a person could see - and hear - for themselves to determine which are really needed based on the way they use their receivers.
>
> For example, they offer many versions of SSB roofing filters, but what exactly does each offer in the way of cleaning up the signals? Tech specs are nice, but would be even better to hear a demonstration in a real world situation.
>
>

13945. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 19:47:29 UTC
From: Doug
Topic: 13934 Message: 13945

What I have not been able to figure out is what causes a good meter to act normal and then change to a real bouncy one. I have compared bouncy meters that I replaced on my TR-4Cw to good ones and cannot find a mechanical or electrical difference. I even tried the static removal route for shiggles without results.

Sent from my iPhone

On May 25, 2013, at 3:04, "Richard Knoppow" <1oldlens1@...> wrote:

> I got curious so I opened up my TR-4 and tested the
> meters to see if a dead short across them would damp them.
> It did not. I am puzzled by this. A meter is a motor and
> like any motor generates a back EMF. Normally, if you short
> the terminals of a meter the pointer moves only very
> sluggishly. In fact, its standard practice to short the
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> Its possible to damp a meter by means of an eddy
> current turn, these meters do not appear to have one.
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> side is broken. I will have to track down a replacement.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

PDSWireless
Quick and Simple Internet Access
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[Non-text portions of this message have been removed]

13946. Re: Are There Any Demonstration Videos of Sherwood Upgrades?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:01:26 UTC
From: marrer_enterprises
Topic: 13943 Message: 13946

Thanks for the reply. I bought a R-4C that already had the Audio Amplifier, Power Supply and Capacitor mods installed. I sent it to Sherwood to be aligned and to check out the installed mods - don't know if the previous owner(s) did the install themselves or had Sherwood do it.

I figured that as long as it was out there, I'd have them install the 3rd Mixer and Product Detector mods too.

With my planned use of the rig - not a big DXer or contester - I didn't think any of the roofing filters would be necessary. But, some sort of demonstration would have helped assure me that I was making the right decision.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> I don't know of any. Would be a good project for a Sherwood fan.
>
> The idea of the 'roofing' filter is to get the most filtering as close
> to the antenna as possible. The 600 Hzroofing filter is obviously for
> CW or data modes. It greatly restricts the Passband Tuner range, and
> effectively kills the Noise Blanker. But for receiving CW in
> impossible conditions it's hard to beat with anything on the market.
> Of course unless provisions are made for switching it out, leaving the
> 8 kHz 'stock' filter,or relay selection of the 2.2 kHz(?) SSB filter,
> it makes the 'C' a CW only receiver. Even with the SSB filter the
> Passband Tuner is still pretty irrelevant. The filter width is purely
> a tradeoff of fidelity vs readability. You can read SSB with a 500 Hz
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> tones that carry 80% or more of the intelligibility, but it doesn't
> sound very good. On the other hand, a 4-6 kHz filter gives great
> fidelity even on an SSB signal, _unless_ there is another station 3
> kHz away!
>
> The 3rd IF/Product Detector mod eliminates the noisy 6EJ7 and provides
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> is what is used in the R-7 and later TR-7s. The AF output is much more
> efficient than the Class A original, greatly reducing the load on the
> power supply.
>
> The Power Supply is also more efficient, using 3 terminal regulator
> ICs. Combined with the reduced AF PA stages the overall heat in the
> receiver is reduced.
>
> There may be more, but that's all I can think of. My opinion is if
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> on the low bands, you probably cannot buy a better receiver. The SSB
> function is also improved under those conditions, just becausethe

> filtering is that much closer to the antenna. In either event you
> give up the NB and most of the Passband Tuner functionality.
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> For day to day hamming on today's uncrowded bands, I still prefer the
> B-Line! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> marrer_enterprises wrote:
> > I've looked around and cannot find much of anything anywhere.
> >
> > Are there any videos online that show a stock R-4C side by side with another receiver containing each of the various Sherwood mods so that a person can get a better idea of the improvements that are available? It would be nice if a person could see - and hear - for themselves to determine which are really needed based on the way they use their receivers.
> >
> > For example, they offer many versions of SSB roofing filters, but what exactly does each offer in the way of cleaning up the signals? Tech specs are nice, but would be even better to hear a demonstration in a real world situation.
> >
> >
>

13947. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:11:24 UTC
From: VE3AX/7
Topic: 4985 Message: 13947

Garey:

BTW, my TC-2 is #236, TC-6 is #116, and CC-1 is # 499.

The noise blanker, model TNB for “transistorized noise blanker”, was made by Westcom Engineering Co. in San Diego around the 1970 time frame. Basically, it was a very high gain IF amp with diode clipping, so adjacent strong signals can be a problem with it. It was available with a choice of IF’s at 40m, 20m or 10m, shipped for $29.95, and there was a separate model for the Swan 250 at $32.95. You could even specify connector type and voltage.

You can read a review in this 1970 “Cheese Bits” put out by the Pack Rats VHF Club.

http://www.packratvhf.com/Cheese%20Bits/Cbits1970_05.pdf

Boy, there are some calls in that article that bring back memories!

In the CC-1, the TNB is mounted so that its slide switch to put it into the IF line to the receiver lines up with the “ON-OFF” push-pull rod meant for that 3rd converter.

73
Peter
VE3AX/7

From: Garey Barrell
Sent: Saturday, May 25, 2013 7:06 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TR-6

Peter -

OK. I suspect that was a VERY late RV-6, I still don't see much demand for split operation on 6M!! Not like you have to deal with pileups that often. :-)

I don't know of any option from Drake ever being made available for that third slot. As I recall the advertisement said something like 'a third slot for another band of your choosing'. Interesting to find a Noise Blanker in there. What was it? Where was it applied? Separate antenna like Collins used?

Bill may have other info on that third slot, but I have found his 'hard drive' full to overflowing just keeping up with what they DID do!! :-) Just as an example, he had no recollection of the color coded crystals for the Late A and B Lines!! I keep forgetting that in spite of his outstanding cooperation and patience with goofballs like me(who even CARES about color coded crystals 50 years later), this was his daily JOB. I remember quite a bit of what I did at NASA and NRAO,

but there's a LOT I doNOT remember at all!! :-)

Dunno about the 5894. It's slightly taller, and considerable lower interelectrode capacitances (it's rated to 500 MHz v 175 for the 8643) but looks like it 'should' work. Apparently the 8643 was a Motorola special tube designed for mobile use, and was only used in one model! How Drake ever found it is amazing. I bought one spare for $40 about 10 years ago from a tube dealer at the Shelby hamfest. It was in a Motorola box and he said that was all he'd ever seen. There's probably a hundred of them in all that mobile FM commercial trash that shows up at every hamfest, if we only knew which one!! :-) I guess I would just keep my eyes open for a spare, and if yours should fail, try a 5894. I'd bet it will either work or could be MADE to work without much effort.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Garey/Al;
>
> Aha! Thanks guys. Found it! Serial #0132, so guess there were more than 60 RV-6's made. I was looking for a serial # font typical of that used on the 4-line but this is half-sized or less, but is the same font as used on at least one of my RV-4's. Just happened that the insulated terminal on the ground wire was covering it up.
>
> Garey – given your history in the ham radio sales & marketing world, any idea what the 3rd expansion slot in the CC-1 was meant for? 220 Mhz? 432 Mhz? Homebrew converter? My CC-1 has a commercially made (non-Drake) aftermarket noise blanker that is operated from the front panel switches for that 3rd converter. Maybe Bill Frost could answer that one?
>
> One other question while we are on the subject of the Drake VHF stuff...has anyone ever tried a 5894 in place of the 8643 in the TC-2? They are pretty close in specs with the 8643 maybe being a little more dissipation/output, but they are a LOT harder to find, I have no spares, and do have near a drawer full of brand new 5894's. Maybe only one way to find out! No need to yet...but would be good to know.
>
> 73
>
> Peter
> VE3AX/7
>
>
> From: Garey Barrell
> Sent: Friday, May 24, 2013 6:56 PM
> To: mailto:DrakeRadio%40yahoogroups.com
> Subject: Re: [DrakeRadio] TR-6

>
>
> Peter -
>
> I've never had an RV-6, but the RV-4/Cs that I have seen have had the
> s/n stamped just to the right of the grounding bolt on the rear lip of
> the chassis.
>
> I don't have any official numbers, but I wouldn't be surprised if
> there were that few RV-6s made. Not a lot of call for 'split'
> operation on 6M.
>
> My TC-6 is s/n 0132, and the TC-2 is s/n 0328. My guess would be
> <250 and <500 respectively. My CC-1 is s/n 502.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> VE3AX/7 wrote:
>> Jim:
>>
>> Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not – wonder if it's somewhere else on the chassis? Maybe have to pull from the cabinet to see.
>>
>> Anyone know how many RV-6's were made? Have heard 60 or so but hard to believe it's that low.
>>
>> How about TC-2's and TC-6's? Think the highest serial # I've seen on those is just on the high side of 300. Highest TC-2 on Ron's site is below 300 – no TC-6's listed.
>>
>> My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken "bandswitch" wafer in it once though – not a fun job.
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>> Peter
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>> From: Jim Shorney
>> Sent: Thursday, May 23, 2013 7:47 PM
>> To: mailto:DrakeRadio%40yahoogroups.com
>> Subject: Re: [DrakeRadio] TR-6
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>> I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
>> the RV-6, original manual, and the last of the optional filters that Drake had

>> when they were selling out the last of the parts stock. I haven't had it on the
>> air in quite a while, due to lack of space in the current shack configuration.
>>
>> 73
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>> -Jim
>> NU0C
>>
>> On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:
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>>> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
>> --
>> Ham Radio NU0C
>> Lincoln, Nebraska, U.S.S.A.
>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13948. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:21:32 UTC
From: Garey Barrell
Topic: 13934 Message: 13948

Doug -

I guess I don't know all Iunderstand about meters..... :-)

There doesn't appear to be any adjustment, aside perhaps from the flat plateunder the movement that was riveted in place after some
adjustment. At first I thought it was the lower meter pivot, put I don't think that's the case. I guessthe two rivets are already there,
and the end of the small plate under the meter movement has a clearance hole. At final test the plate is shifted to whatever end, and then
the rivets are crunched down. Looks like a fairly limited range of movement is available. I'm reluctant to disassemble this meter any
further, since it IS a good one. Perhaps if someone has a bad (bouncy) one to experiment on. Probably going to take someone steadier than
me if thereis to be any hope for successfully reassembling it!!

The other thing that occurred to me a few minutes ago is that these meters are shunted by a fairly low resistance in circuit. The TR-4 meter
is shunted by ~2 ohms, which is essentially a dead short to a 440 ohm movement winding. Even the ones in the Twins have only a hundred or so
ohms across them.

I just don't understand what makes one 'change' after some period of time.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug wrote:
> What I have not been able to figure out is what causes a good meter to act normal and then change to a real bouncy one. I have compared bouncy meters that I replaced on my TR-4Cw to good ones and cannot find a mechanical or electrical difference. I even tried the static removal route for shiggles without results.
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> Sent from my iPhone
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> On May 25, 2013, at 3:04, "Richard Knoppow" <1oldlens1@...> wrote:
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>> I got curious so I opened up my TR-4 and tested the
>> meters to see if a dead short across them would damp them.
>> It did not. I am puzzled by this. A meter is a motor and
>> like any motor generates a back EMF. Normally, if you short
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>> sluggishly. In fact, its standard practice to short the

>> terminals when shipping meters. All I can think is that
>> these are not very sensitive meters. I did not want to
>> disconnect them to measure the DC resistance but that would
>> be a clue.
>> Its possible to damp a meter by means of an eddy
>> current turn, these meters do not appear to have one.
>> BTW, I discovered the Receive/Transceive switch on the
>> side is broken. I will have to track down a replacement.
>>
>>

13949. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:42:11 UTC
From: Garey Barrell
Topic: 4985 Message: 13949

Peter -

OK, I'll add yours to MY list! Ron used to include units that no longer had the final inspection tag, with an estimate based on crystal or
electrolytic date codes or purchase dates, but made the decision some time ago to accept ONLY those with the official tag date.

I keep my own little list starting with his list of some years ago and then adding s/n as found even on eBay, etc. just to see what the
range of s/ns might be.

Interesting product. I must have missed that one completely. Yes, diode clipping can cause as much or more trouble as it solves if
overdriven. I will say it's the only thing I've ever seen or heard of being used in that slot..... :-)

I just read the review. Sounds like a valid concept, getting the diode clipper in front of the IF and IF filter. You could put a Drake
type 'blanker' in line in the same way, i.e., sample the spike, invert and amplify it and apply to a later stage within the filter. I'm
surprised someone hasn't come up with that by now. I guess there are so many standalone VHF rigs that nobody uses converters anymore.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

VE3AX/7 wrote:
> Garey:
>
> BTW, my TC-2 is #236, TC-6 is #116, and CC-1 is # 499.
>
> The noise blanker, model TNB for “transistorized noise blanker”, was made by Westcom Engineering Co. in San Diego around the 1970 time frame. Basically, it was a very high gain IF amp with diode clipping, so adjacent strong signals can be a problem with it. It was available with a choice of IF’s at 40m, 20m or 10m, shipped for $29.95, and there was a separate model for the Swan 250 at $32.95. You could even specify connector type and voltage.
>
> You can read a review in this 1970 “Cheese Bits” put out by the Pack Rats VHF Club.
>
> http://www.packratvhf.com/Cheese%20Bits/Cbits1970_05.pdf
>
> Boy, there are some calls in that article that bring back memories!

>
> In the CC-1, the TNB is mounted so that its slide switch to put it into the IF line to the receiver lines up with the “ON-OFF” push-pull rod meant for that 3rd converter.
>
> 73
> Peter
> VE3AX/7
>
> From: Garey Barrell
> Sent: Saturday, May 25, 2013 7:06 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TR-6
>
>
> Peter -
>
> OK. I suspect that was a VERY late RV-6, I still don't see much
> demand for split operation on 6M!! Not like you have to deal with
> pileups that often. :-)
>
> I don't know of any option from Drake ever being made available for
> that third slot. As I recall the advertisement said something like 'a
> third slot for another band of your choosing'. Interesting to find a
> Noise Blanker in there. What was it? Where was it applied? Separate
> antenna like Collins used?
>
> Bill may have other info on that third slot, but I have found his
> 'hard drive' full to overflowing just keeping up with what they DID
> do!! :-) Just as an example, he had no recollection of the color
> coded crystals for the Late A and B Lines!! I keep forgetting that in
> spite of his outstanding cooperation and patience with goofballs like
> me(who even CARES about color coded crystals 50 years later), this was
> his daily JOB. I remember quite a bit of what I did at NASA and NRAO,
> but there's a LOT I doNOT remember at all!! :-)
>
> Dunno about the 5894. It's slightly taller, and considerable lower
> interelectrode capacitances (it's rated to 500 MHz v 175 for the 8643)
> but looks like it 'should' work. Apparently the 8643 was a Motorola
> special tube designed for mobile use, and was only used in one model!
> How Drake ever found it is amazing. I bought one spare for $40 about
> 10 years ago from a tube dealer at the Shelby hamfest. It was in a
> Motorola box and he said that was all he'd ever seen. There's
> probably a hundred of them in all that mobile FM commercial trash that
> shows up at every hamfest, if we only knew which one!! :-) I guess
> I would just keep my eyes open for a spare, and if yours should fail,
> try a 5894. I'd bet it will either work or could be MADE to work
> without much effort.
>
> 73, Garey - K4OAH
> Glen Allen, VA

>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> VE3AX/7 wrote:
>> Garey/Al;
>>
>> Aha! Thanks guys. Found it! Serial #0132, so guess there were more than 60 RV-6's made. I was looking for a serial # font typical of that used on the 4-line but this is half-sized or less, but is the same font as used on at least one of my RV-4's. Just happened that the insulated terminal on the ground wire was covering it up.
>>
>> Garey – given your history in the ham radio sales & marketing world, any idea what the 3rd expansion slot in the CC-1 was meant for? 220 Mhz? 432 Mhz? Homebrew converter? My CC-1 has a commercially made (non-Drake) aftermarket noise blanker that is operated from the front panel switches for that 3rd converter. Maybe Bill Frost could answer that one?
>>
>> One other question while we are on the subject of the Drake VHF stuff...has anyone ever tried a 5894 in place of the 8643 in the TC-2? They are pretty close in specs with the 8643 maybe being a little more dissipation/output, but they are a LOT harder to find, I have no spares, and do have near a drawer full of brand new 5894's. Maybe only one way to find out! No need to yet...but would be good to know.
>>
>> 73
>>
>> Peter
>> VE3AX/7
>>
>>
>> From: Garey Barrell
>> Sent: Friday, May 24, 2013 6:56 PM
>> To: mailto:DrakeRadio%40yahoogroups.com
>> Subject: Re: [DrakeRadio] TR-6
>>
>>
>> Peter -
>>
>> I've never had an RV-6, but the RV-4/Cs that I have seen have had the
>> s/n stamped just to the right of the grounding bolt on the rear lip of
>> the chassis.
>>
>> I don't have any official numbers, but I wouldn't be surprised if
>> there were that few RV-6s made. Not a lot of call for 'split'
>> operation on 6M.
>>
>> My TC-6 is s/n 0132, and the TC-2 is s/n 0328. My guess would be
>> <250 and <500 respectively. My CC-1 is s/n 502.
>>
>> 73, Garey - K4OAH

>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> VE3AX/7 wrote:
>>> Jim:
>>>
>>> Does your RV-6 have a serial # on the rear plate of the chassis? Mine does not – wonder if it's somewhere else on the chassis? Maybe have to pull from the cabinet to see.
>>>
>>> Anyone know how many RV-6's were made? Have heard 60 or so but hard to believe it's that low.
>>>
>>> How about TC-2's and TC-6's? Think the highest serial # I've seen on those is just on the high side of 300. Highest TC-2 on Ron's site is below 300 – no TC-6's listed.
>>>
>>> My TR-6 is an early one at #086. Works fine and is loaded – had to replace a broken "bandswitch" wafer in it once though – not a fun job.
>>>
>>> 73
>>> Peter
>>> VE3AX/7
>>>
>>> From: Jim Shorney
>>> Sent: Thursday, May 23, 2013 7:47 PM
>>> To: mailto:DrakeRadio%40yahoogroups.com
>>> Subject: Re: [DrakeRadio] TR-6
>>>
>>>
>>>
>>> I've got TR-6 #455, originally owned by a ham in Council Bluffs, IA. Also have
>>> the RV-6, original manual, and the last of the optional filters that Drake had
>>> when they were selling out the last of the parts stock. I haven't had it on the
>>> air in quite a while, due to lack of space in the current shack configuration.
>>>
>>> 73
>>>
>>> -Jim
>>> NU0C
>>>
>>> On Thu, 23 May 2013 20:46:22 -0000, k4swisscheese wrote:
>>>
>>>> I just joined the group and wanted to see if there were any TR-6 owners out there. I acquired one (serial 5xx) last week that has been in a closet for many years. It will require some clean up. I understand they are fairly rare because not many were made. I'd like to see if there are any "restoration specialists" that could be recommended.
>>> --
>>> Ham Radio NU0C

>>> Lincoln, Nebraska, U.S.S.A.
>>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>>>
>>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
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>> ------------------------------------
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>> Yahoo! Groups Links
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> Yahoo! Groups Links
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13950. Re: [DrakeRadio] TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:54:17 UTC
From: Richard Knoppow
Topic: 13934 Message: 13950

----- Original Message -----
From: "Doug" <dcoffman@...>
To: <DrakeRadio@yahoogroups.com>
Cc: <DrakeRadio@yahoogroups.com>
Sent: Saturday, May 25, 2013 12:47 PM
Subject: Re: [DrakeRadio] TR-4 bouncing meters

> What I have not been able to figure out is what causes a
> good meter to act normal and then change to a real bouncy
> one. I have compared bouncy meters that I replaced on my
> TR-4Cw to good ones and cannot find a mechanical or
> electrical difference. I even tried the static removal
> route for shiggles without results.
>
I don't think a static charge would cause bouncing.
Its more likely to cause the pointer to stick or to move in
jerks. It could also account for a meter reading up-scale
when turned off. Both of those symptoms can also be caused
by dirt in the coil or something between the pointer and
scale. Sometimes if its a static charge the pointer will
move around if you drag your finger across the window. The
bounce is something else. One would think there would be
some measurable difference between two meters of the same
type where one bounced and the other didn't. If its a
magnet problem it should affect the sensitivity. It might
be interesting to dig out those two meters and see how they
work as generators. Hook each to a scope and jiggle them to
move the pointer, see if there is any difference in the
voltage at the terminals. The meters in my TR-4, which are
very bouncy, did not change when I put a clip lead across
the terminals (with the rig off of course). They still
bounced about as much as before when moved around. I
suppose its possible for something to have changed
mechanically but that should show up as either a change in
sensitivity or in generated voltage. Somewhere there is
someone who is a genuine expert in these things who would
know.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13951. looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 20:58:27 UTC
From: yash@aol.com
Topic: 13951 Message: 13951

Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as transformer is good. can do pay pal+ or USPS MO.
thanks
dale wt4t please get back off list.

[Non-text portions of this message have been removed]

13952. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 21:07:38 UTC
From: Sindre Torp
Topic: 4985 Message: 13952

Hi,

FYI:
Here are the serial numbers of my TR-6's and more:

TR-6 # 016
TR-6 # 493
(A third TR-6 is on the way. I don't know the serial # yet)
RV-6 # 011
TC-6 # 0194
SC-6 # 001 !!!!! (I have another too that I have not yet checked)

TC-2 # 0035
TC-2 # 0052
TC-2 # 0325

CC-1 # 002 !!!!
CC-1 # 545
CC-1 # 585

I have not checked my SC-2's.

73,
Sindre, LA6OP

[Non-text portions of this message have been removed]

13953. Re: [DrakeRadio] looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 21:13:07 UTC
From: William Houghton
Topic: 13951 Message: 13953

Hi Dale,

What are you willing to offer for an AC-3, working but not recapped.

73,

Bill

PS- I'm still interested in the meter cover.

From: "yash@..." <yash@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 25, 2013 1:58:48 PM
Subject: [DrakeRadio] looking for a power supply

Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
transformer is good. can do pay pal+ or USPS MO.
thanks
dale wt4t please get back off list.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13954. L-4 Amp

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 21:28:48 UTC
From: John Sehring
Topic: 13954 Message: 13954

Keeping the filaments at the correct voltage is very important to get maximum life from tubes.

Seems I recall Eimac (and others) want +-5% on that. Both too much and too little are bad.

What with elevated line voltage these days, 220 VAC has become 240. So it behooves to check fil. voltage at the tube socket both with & without amp. load.

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

13955. Re: [DrakeRadio] looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 21:58:17 UTC
From: yash@aol.com
Topic: 13951 Message: 13955

Bill
regular ac-3 or the real old one with the big choke? how about 50.00 and the meter from the t4x.
dale wt4t

-----Original Message-----
From: William Houghton <rdrbill@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, May 25, 2013 5:13 pm
Subject: Re: [DrakeRadio] looking for a power supply

Hi Dale,

What are you willing to offer for an AC-3, working but not recapped.

73,

Bill

PS- I'm still interested in the meter cover.

From: "yash@..." <yash@...>
To: DrakeRadio@yahoogroups.com
Sent: Sat, May 25, 2013 1:58:48 PM
Subject: [DrakeRadio] looking for a power supply

Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
transformer is good. can do pay pal+ or USPS MO.
thanks
dale wt4t please get back off list.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13956. Re: TR-4 bouncing meters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 22:46:58 UTC
From: w4rl@bellsouth.net
Topic: 13934 Message: 13956

Hi fellas, Richard Harder WA4FUU who originally posed the 'Bouncing Meters' query is a good friend of mine and lives only a few miles away. He emailed me about my TR-4C's meter but before I could reply he'd already left to go see his daughter and her family. I don't know if Richard has been able to read all the great comments but I know if he hasen't he'll be very pleased when he gets home. On further note, Richard is the one who found the problem in my -4C ie, being intermittent/erratic in both transmit and receive. I had chased that gremlin for months to be in fact. Gave up and asked for his help. Richard found a loose tube socket which with the least physical movement or thermal induced metal expansion or contraction (breaking ground path) would send that rig into hysterics. Sorta a serendipitous find that I should have found, but Richard was the one who thought outside of the box, being the better tech than I. Soooo.....wiggle and jiggle cause loose parts can really tax your smarts.

It tis great to be with great group 'of ya own kind' with all the team work that occurs in earnest. Guys, this is good.

73 Robert W4RL

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
> I got curious so I opened up my TR-4 and tested the
> meters to see if a dead short across them would damp them.
> It did not. I am puzzled by this. A meter is a motor and
> like any motor generates a back EMF. Normally, if you short
> the terminals of a meter the pointer moves only very
> sluggishly. In fact, its standard practice to short the
> terminals when shipping meters. All I can think is that
> these are not very sensitive meters. I did not want to
> disconnect them to measure the DC resistance but that would
> be a clue.
> Its possible to damp a meter by means of an eddy
> current turn, these meters do not appear to have one.
> BTW, I discovered the Receive/Transceive switch on the
> side is broken. I will have to track down a replacement.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

13957. Re: [DrakeRadio] Re: Are There Any Demonstration Videos of Sherwood Upgrades?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 23:14:31 UTC
From: Steve Wedge
Topic: 13943 Message: 13957

Stick to the audio mods and anything with the 3rd mixer for late-production R-4C's. That 3rd mixer was a real noise generator. There's a mod by Sartori that's simple to implement with only a choke and some other passive components and some slight re-wiring of the 3rd mixer. It is definitely worth doing. You can also substantially cut down on the frying pan noise by judiciously selecting a 6EJ7 that is quiet.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: marrer_enterprises
Sent: Saturday, May 25, 2013 4:01 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Are There Any Demonstration Videos of Sherwood Upgrades?

Thanks for the reply. I bought a R-4C that already had the Audio Amplifier, Power Supply and Capacitor mods installed. I sent it to Sherwood to be aligned and to check out the installed mods - don't know if the previous owner(s) did the install themselves or had Sherwood do it.

I figured that as long as it was out there, I'd have them install the 3rd Mixer and Product Detector mods too.

With my planned use of the rig - not a big DXer or contester - I didn't think any of the roofing filters would be necessary. But, some sort of demonstration would have helped assure me that I was making the right decision.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> I don't know of any. Would be a good project for a Sherwood fan.
>
> The idea of the 'roofing' filter is to get the most filtering as close
> to the antenna as possible. The 600 Hzroofing filter is obviously for
> CW or data modes. It greatly restricts the Passband Tuner range, and
> effectively kills the Noise Blanker. But for receiving CW in
> impossible conditions it's hard to beat with anything on the market.
> Of course unless provisions are made for switching it out, leaving the
> 8 kHz 'stock' filter,or relay selection of the 2.2 kHz(?) SSB filter,
> it makes the 'C' a CW only receiver. Even with the SSB filter the
> Passband Tuner is still pretty irrelevant. The filter width is purely
> a tradeoff of fidelity vs readability. You can read SSB with a 500 Hz
> filter by manipulation the Passband Tuner to pick out the midrange
> tones that carry 80% or more of the intelligibility, but it doesn't

> sound very good. On the other hand, a 4-6 kHz filter gives great
> fidelity even on an SSB signal, _unless_ there is another station 3
> kHz away!
>
> The 3rd IF/Product Detector mod eliminates the noisy 6EJ7 and provides
> a much cleaner (lower distortion) PD, using I think the MC1496? which
> is what is used in the R-7 and later TR-7s. The AF output is much more
> efficient than the Class A original, greatly reducing the load on the
> power supply.
>
> The Power Supply is also more efficient, using 3 terminal regulator
> ICs. Combined with the reduced AF PA stages the overall heat in the
> receiver is reduced.
>
> There may be more, but that's all I can think of. My opinion is if
> you need the best CW receiver for contest or DX operation, especially
> on the low bands, you probably cannot buy a better receiver. The SSB
> function is also improved under those conditions, just becausethe
> filtering is that much closer to the antenna. In either event you
> give up the NB and most of the Passband Tuner functionality.
>
> For day to day hamming on today's uncrowded bands, I still prefer the
> B-Line! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> marrer_enterprises wrote:
> > I've looked around and cannot find much of anything anywhere.
> >
> > Are there any videos online that show a stock R-4C side by side with another receiver containing each of the various Sherwood mods so that a person can get a better idea of the improvements that are available? It would be nice if a person could see - and hear - for themselves to determine which are really needed based on the way they use their receivers.
> >
> > For example, they offer many versions of SSB roofing filters, but what exactly does each offer in the way of cleaning up the signals? Tech specs are nice, but would be even better to hear a demonstration in a real world situation.
> >
> >
>

[Non-text portions of this message have been removed]

13958. Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-25 23:54:22 UTC
From: Steve Wedge
Topic: 13941 Message: 13958

Just to "recap" (sorry!).

The problem I had with my R-4B was due to a bad capacitor C126. This cap sits in the plate circuit of V4, right at the input of the PBT circuit. It was apparently open, as removing it from the circuit did not change the symptoms.

Symptoms were a lack of responsiveness of the S-meter, severe attenuation (2-3 S-units) of the signal at the 400 Hz setting and an inability to peak the top-left coil in the slug rack when doing the PBT alignment. The other 3 coils peaked as they should.

This capacitor is a metal-film part and is located near the power supply, on a small board (Garey's CD calls it out as Board 7). Mine was a black plastic part but I've seen pics of the yellow cylinders as well. New parts are shaped more like silver mica parts and are much smaller. Replacements for this cap are available at Radio Shack.
Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Wedge
Sent: Saturday, May 25, 2013 1:09 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yes, it was C126. The S-meter is now also much more sensitive than it was, too.

I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!

I'll have spares, anyway.

It's sitting in place of my station R-4B and now I have a tough decision to make.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

13959. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 02:05:50 UTC
From: Garey Barrell
Topic: 4985 Message: 13959

Hello Sindre -

So good to hear from you..... How goes the website?? It's a real 'time-sink' isn't it? :-)

Come back and see us.

Thanks for the data points on the '6' gear.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Sindre Torp wrote:
> Hi,
>
> FYI:
> Here are the serial numbers of my TR-6's and more:
>
> TR-6 # 016
> TR-6 # 493
> (A third TR-6 is on the way. I don't know the serial # yet)
> RV-6 # 011
> TC-6 # 0194
> SC-6 # 001 !!!!! (I have another too that I have not yet checked)
>
> TC-2 # 0035
> TC-2 # 0052
> TC-2 # 0325
>
> CC-1 # 002 !!!!
> CC-1 # 545
> CC-1 # 585
>
> I have not checked my SC-2's.
>
> 73,
> Sindre, LA6OP
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------

>
> Yahoo! Groups Links
>
>
>
>

13960. Re: [DrakeRadio] TR-6

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 02:17:26 UTC
From: Jim Shorney
Topic: 4985 Message: 13960

On Fri, 24 May 2013 17:28:03 -0700, VE3AX/7 wrote:

>Jim:
>
>Does your RV-6 have a serial # on the rear plate of the chassis?

Dunno. :D It's not convenient for me to look at it right now, and I would have to remove the AC-4 from the cabinet as well. I see that the question as been answered anyway.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13961. Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 02:55:11 UTC
From: Richard Knoppow
Topic: 13941 Message: 13961

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, May 25, 2013 4:54 PM
Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

> Just to "recap" (sorry!).
>
> The problem I had with my R-4B was due to a bad capacitor
> C126. This cap sits in the plate circuit of V4, right at
> the input of the PBT circuit. It was apparently open, as
> removing it from the circuit did not change the symptoms.
>
> Symptoms were a lack of responsiveness of the S-meter,
> severe attenuation (2-3 S-units) of the signal at the 400
> Hz setting and an inability to peak the top-left coil in
> the slug rack when doing the PBT alignment. The other 3
> coils peaked as they should.
>
> This capacitor is a metal-film part and is located near
> the power supply, on a small board (Garey's CD calls it
> out as Board 7). Mine was a black plastic part but I've
> seen pics of the yellow cylinders as well. New parts are
> shaped more like silver mica parts and are much smaller.
> Replacements for this cap are available at Radio Shack.
> Steve Wedge, W1ES/4
>

If you have means to test this cap it would be
interesting to know what happened to it. Its a bypass cap
on a B+ line that feeds the plates of the in put and output
amps of the tunable IF plus the line goes to a couple of the
IF screens. I think the S-meter reads the difference in
current between the screens and plates. If its leaky it
could pull the voltage down, if open of has a high ESR it
could allow feedback through the line. I am not sure I
would have spotted this on my own.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13962. t4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 11:41:41 UTC
From: yash@aol.com
Topic: 13962 Message: 13962

Looking for a nice t4xc drake transmitter, the c model only. Do not need the power supply. looking for a clean rig,but will consider all. do pay pal + or usps mo.please get back off list.
thanks
dale wt4t

[Non-text portions of this message have been removed]

13963. Re: looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 13:11:45 UTC
From: Greg
Topic: 13951 Message: 13963

There is a real basket-case Drake AC-3 inside a MS-4 cabinet on eBay, auction # :
370822410451
This Hebron, KY is battered, shows orrosion, and dirty (dropped?).
Great candidate for the restorer -- BUT not bargain hunters with no shop skills.

w9gb

--- In DrakeRadio@yahoogroups.com, William Houghton <rdrbill@...> wrote:
>
> Hi Dale,
>
> What are you willing to offer for a Drake AC-3, working but not recapped.
>
> 73,
> Bill
> PS- I'm still interested in the meter cover.
> _____
> From: "yash@..." <yash@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, May 25, 2013 1:58:48 PM
> Subject: [DrakeRadio] looking for a power supply
>
> Â
> Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
> transformer is good. can do pay pal+ or USPS MO.
> thanks
> dale wt4t please get back off list.
>
> [Non-text portions of this message have been removed]
>
>
>
>
> [Non-text portions of this message have been removed]
>

13964. Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 13:46:49 UTC
From: Garey Barrell
Topic: 13941 Message: 13964

I'm guessing it's open. Those are very high reliability, film/epoxy caps and wouldn't show an increase in ESR due to evaporation like
electrolytics do. As you say, it's part of the S-Meter bridge circuit, which was my second clue. First clue was the inability to tune L1 in
the PB tuner. If C126 is open, there is no AC return for the L1/C1 resonance pair, which would make it difficult to tune! :-) Granted the
DurMica 'could' fail, as could the 0.015 uF C2, but both are a lot less accessible than C126!! :-) Occam's Razor strikes again.......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, May 25, 2013 4:54 PM
> Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
> scores again!
>
>
>> Just to "recap" (sorry!).
>>
>> The problem I had with my R-4B was due to a bad capacitor
>> C126. This cap sits in the plate circuit of V4, right at
>> the input of the PBT circuit. It was apparently open, as
>> removing it from the circuit did not change the symptoms.
>>
>> Symptoms were a lack of responsiveness of the S-meter,
>> severe attenuation (2-3 S-units) of the signal at the 400
>> Hz setting and an inability to peak the top-left coil in
>> the slug rack when doing the PBT alignment. The other 3
>> coils peaked as they should.
>>
>> This capacitor is a metal-film part and is located near
>> the power supply, on a small board (Garey's CD calls it
>> out as Board 7). Mine was a black plastic part but I've
>> seen pics of the yellow cylinders as well. New parts are
>> shaped more like silver mica parts and are much smaller.
>> Replacements for this cap are available at Radio Shack.
>> Steve Wedge, W1ES/4
>>

> If you have means to test this cap it would be
> interesting to know what happened to it. Its a bypass cap
> on a B+ line that feeds the plates of the in put and output
> amps of the tunable IF plus the line goes to a couple of the
> IF screens. I think the S-meter reads the difference in
> current between the screens and plates. If its leaky it
> could pull the voltage down, if open of has a high ESR it
> could allow feedback through the line. I am not sure I
> would have spotted this on my own.
>
>

13965. Re: [DrakeRadio] looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 14:49:56 UTC
From: Mikey
Topic: 13951 Message: 13965

Bill, i am also looking 4 a P.S.- do you have more than one!? Mike, N9LSD

On Sat, May 25, 2013 5:13 PM EDT William Houghton wrote:

>Hi Dale,
>
>What are you willing to offer for an AC-3, working but not recapped.
>
>73,
>
>Bill
>
>PS- I'm still interested in the meter cover.
>
>
>
>_____
>From: "yash@..." <yash@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Sat, May 25, 2013 1:58:48 PM
>Subject: [DrakeRadio] looking for a power supply
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>
>Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
>transformer is good. can do pay pal+ or USPS MO.
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>dale wt4t please get back off list.
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>
>
>[Non-text portions of this message have been removed]
>

13966. Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 17:09:31 UTC
From: Steve Wedge
Topic: 13941 Message: 13966

I wasn't seeing the forest for the trees, either, Richard. Garey suggested checking C126 and it made perfect sense. I was focused in on the circuit of the PBT itself or my brain was seeing that cap and equating it with the 1030 pf cap in the filter itself (it's nearby and would also affect L1's tuning if it was go go bad).

I'm listening to the R-4B right now, on 17m and it sounds great. I do believe that this receiver's S-meter (which came from my parts T-4XB and got the scale transplanted) is slightly "bouncy" like some of the TR-4's that have been described over the past week or so. It bounces even with the AVC set to "slow". It doesn't bother me, though.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Saturday, May 25, 2013 10:55 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, May 25, 2013 4:54 PM
Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
scores again!

> Just to "recap" (sorry!).
>
> The problem I had with my R-4B was due to a bad capacitor
> C126. This cap sits in the plate circuit of V4, right at
> the input of the PBT circuit. It was apparently open, as
> removing it from the circuit did not change the symptoms.
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> Symptoms were a lack of responsiveness of the S-meter,
> severe attenuation (2-3 S-units) of the signal at the 400
> Hz setting and an inability to peak the top-left coil in
> the slug rack when doing the PBT alignment. The other 3
> coils peaked as they should.
>
> This capacitor is a metal-film part and is located near
> the power supply, on a small board (Garey's CD calls it
> out as Board 7). Mine was a black plastic part but I've
> seen pics of the yellow cylinders as well. New parts are
> shaped more like silver mica parts and are much smaller.
> Replacements for this cap are available at Radio Shack.

> Steve Wedge, W1ES/4
>

If you have means to test this cap it would be
interesting to know what happened to it. Its a bypass cap
on a B+ line that feeds the plates of the in put and output
amps of the tunable IF plus the line goes to a couple of the
IF screens. I think the S-meter reads the difference in
current between the screens and plates. If its leaky it
could pull the voltage down, if open of has a high ESR it
could allow feedback through the line. I am not sure I
would have spotted this on my own.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13967. Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 17:17:27 UTC
From: Steve Wedge
Topic: 13941 Message: 13967

It was very easy to get at C126

If any of you have this part fail, I've now got spares and can pop one in the mail.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Sunday, May 26, 2013 9:46 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey scores again!

I'm guessing it's open. Those are very high reliability, film/epoxy caps and wouldn't show an increase in ESR due to evaporation like
electrolytics do. As you say, it's part of the S-Meter bridge circuit, which was my second clue. First clue was the inability to tune L1 in
the PB tuner. If C126 is open, there is no AC return for the L1/C1 resonance pair, which would make it difficult to tune! :-) Granted the
DurMica 'could' fail, as could the 0.015 uF C2, but both are a lot less accessible than C126!! :-) Occam's Razor strikes again.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, May 25, 2013 4:54 PM
> Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
> scores again!
>
>
>> Just to "recap" (sorry!).
>>
>> The problem I had with my R-4B was due to a bad capacitor
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>> the input of the PBT circuit. It was apparently open, as
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>> severe attenuation (2-3 S-units) of the signal at the 400
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>> coils peaked as they should.
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>> the power supply, on a small board (Garey's CD calls it
>> out as Board 7). Mine was a black plastic part but I've
>> seen pics of the yellow cylinders as well. New parts are
>> shaped more like silver mica parts and are much smaller.
>> Replacements for this cap are available at Radio Shack.
>> Steve Wedge, W1ES/4
>>
> If you have means to test this cap it would be
> interesting to know what happened to it. Its a bypass cap
> on a B+ line that feeds the plates of the in put and output
> amps of the tunable IF plus the line goes to a couple of the
> IF screens. I think the S-meter reads the difference in
> current between the screens and plates. If its leaky it
> could pull the voltage down, if open of has a high ESR it
> could allow feedback through the line. I am not sure I
> would have spotted this on my own.
>
>

[Non-text portions of this message have been removed]

13968. Re: [DrakeRadio] Re: looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 18:53:57 UTC
From: yash@aol.com
Topic: 13951 Message: 13968

Greg
as long as the transformer is good the rest is easy. will take a look.
dale wt4t

-----Original Message-----
From: Greg <gregory.beat@comcast.net>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, May 26, 2013 9:11 am
Subject: [DrakeRadio] Re: looking for a power supply

There is a real basket-case Drake AC-3 inside a MS-4 cabinet on eBay, auction # :
370822410451
This Hebron, KY is battered, shows orrosion, and dirty (dropped?).
Great candidate for the restorer -- BUT not bargain hunters with no shop skills.

w9gb

--- In DrakeRadio@yahoogroups.com, William Houghton <rdrbill@...> wrote:
>
> Hi Dale,
>
> What are you willing to offer for a Drake AC-3, working but not recapped.
>
> 73,
> Bill
> PS- I'm still interested in the meter cover.
> _____
> From: "yash@..." <yash@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Sat, May 25, 2013 1:58:48 PM
> Subject: [DrakeRadio] looking for a power supply
>
> Â
> Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
> transformer is good. can do pay pal+ or USPS MO.
> thanks
> dale wt4t please get back off list.
>
> [Non-text portions of this message have been removed]
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

13969. Re: [DrakeRadio] looking for a power supply

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 22:28:14 UTC
From: William Houghton
Topic: 13951 Message: 13969

Mike,

All of my other ones are allocated to rigs that I'm keeping.
Sorry & 73,

Bill

From: Mikey <m.bunner1@yahoo.com>
To: drakeradio@yahoogroups.com
Sent: Sun, May 26, 2013 7:50:10 AM
Subject: Re: [DrakeRadio] looking for a power supply

Bill, i am also looking 4 a P.S.- do you have more than one!? Mike, N9LSD

On Sat, May 25, 2013 5:13 PM EDT William Houghton wrote:

>Hi Dale,
>
>What are you willing to offer for an AC-3, working but not recapped.
>
>73,
>
>Bill
>
>PS- I'm still interested in the meter cover.
>
>
>
>_____
>From: "yash@..." <yash@...>
>To: DrakeRadio@yahoogroups.com
>Sent: Sat, May 25, 2013 1:58:48 PM
>Subject: [DrakeRadio] looking for a power supply
>
>
>Looking for either a AC-3 OR AC-4 drake supply,will consider all as long as
>transformer is good. can do pay pal+ or USPS MO.
>thanks
>dale wt4t please get back off list.
>
>[Non-text portions of this message have been removed]
>
>
>
>

>[Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

13970. I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-26 23:43:14 UTC
From: Steve Wedge
Topic: 13970 Message: 13970

That T-4X that my son chased all over Asheville arrived on my doorstep last week. Cosmetically, it's about a 7/10. The PTO shaft has an enormous amount of play and the meter doesn't appear to be working or there's absolutely no idle current. The PTO and premixer are working. There's very little detent in the band switch. I see the ball bearing is there, so anyone got any suggestions on bringing back some positive detent?

This should be a good candidate for me to document with photos as I bring it back to life.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

13971. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 02:25:47 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 13971

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

13972. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 02:36:37 UTC
From: Richard Knoppow
Topic: 13970 Message: 13972

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 26, 2013 4:43 PM
Subject: [DrakeRadio] I've got a candidate for a photo
story.

> That T-4X that my son chased all over Asheville arrived on
> my doorstep last week. Cosmetically, it's about a 7/10.
> The PTO shaft has an enormous amount of play and the meter
> doesn't appear to be working or there's absolutely no idle
> current. The PTO and premixer are working. There's very
> little detent in the band switch. I see the ball bearing
> is there, so anyone got any suggestions on bringing back
> some positive detent?
>
> This should be a good candidate for me to document with
> photos as I bring it back to life.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of
> wisdom appended thereto.

Try cleaning the switch and lubricating the detent
first. I don't remember exactly how this switch is
constructed but most have a sort of scalloped surface the
ball runs in and a spring to load the ball. If the spring is
weak the detent action will be weak.
The PTO is the same problem I asked about several days
ago, there is an Allen head screw that adjusts the loading
on the single ball that holds the back end of the shaft. If
there is really a lot of play the ball may have fallen out.
Its probably a standard size ball so if its missing one can
be had from many hardware stores. Garey or someone probably
knows the size.
Lack of indication on the meter might be a bad meter,
bad resistors in the measuring circuit, bad tubes (really no
current). You should be able to isolate this with a plain
VOM. I would start with the meter with the set turned off.
If it deflects with the ohm meter put across it its OK. You
can check the tubes for current by measuring the drop across

the cathode resistors. Of course check the power supply. I
am assuming this TX is similar to the T4XB.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13973. Interesting T4xC Problem Solved

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 04:06:15 UTC
From: GALE STEWARD
Topic: 13973 Message: 13973

Since my B-line has been operational, I started on refurbing the C-line, starting with the T4XC & AC-4. I installed another of Paul's upgrade kits in the AC-4. Cleaned up the T4XC and looked everything over.

When I fired up the T4XC on the bench (separate, no rcvr), thru my Bird 43 and my 200W, 30db attenuator with an additional 20db pad on the end of it that I use as a load. The xmtr show output on 7, 14, & 21 bands but the RF tune peaked in the wrong places (not in the band). I hooked up the freq. counter and found the frequencies to be way off. EX: the 7 mhz peak was at 5.6 mhz. There is an accessory xtal installed for 28.0 mhz in position 1 and when switching to that position with the XTALS switch, everything worked normally. The RF Tune peaked at the correct spot and the counter read correctly. I found that the wafer of the Band Switch that switches the band xtals showed an open, the common terminal (wiper). It all looked good but showed open. I applied Deoxit with a Q-tip and everything started to work normally. I've found intermittent connections before but never a "full open", especially when the switch looks all OK. It was reading in the megohms!

Anyway, apparently the T4XC is OK and I'll start on the two R4Cs.

73, Stew K3ND

[Non-text portions of this message have been removed]

13974. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 14:11:55 UTC
From: Steve Wedge
Topic: 13970 Message: 13974

Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Sunday, May 26, 2013 10:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 26, 2013 4:43 PM
Subject: [DrakeRadio] I've got a candidate for a photo
story.

> That T-4X that my son chased all over Asheville arrived on
> my doorstep last week. Cosmetically, it's about a 7/10.
> The PTO shaft has an enormous amount of play and the meter
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> Steve Wedge, W1ES/4
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Try cleaning the switch and lubricating the detent
first. I don't remember exactly how this switch is
constructed but most have a sort of scalloped surface the
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weak the detent action will be weak.
The PTO is the same problem I asked about several days

ago, there is an Allen head screw that adjusts the loading on the single ball that holds the back end of the shaft. If there is really a lot of play the ball may have fallen out. Its probably a standard size ball so if its missing one can be had from many hardware stores. Garey or someone probably knows the size.
Lack of indication on the meter might be a bad meter, bad resistors in the measuring circuit, bad tubes (really no current). You should be able to isolate this with a plain VOM. I would start with the meter with the set turned off. If it deflects with the ohm meter put across it its OK. You can check the tubes for current by measuring the drop across the cathode resistors. Of course check the power supply. I am assuming this TX is similar to the T4XB.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

13975. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 14:17:06 UTC
From: Garey Barrell
Topic: 13970 Message: 13975

Steve -

Sounds like fun!!! :-)

Balls are all 1/8" steel, Ace or True Value, usually in the little yellow boxes back in the fastener section.

Should be 10 in front, and one at the back. Allen wrench is 3/32".

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
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>
>
> From: Richard Knoppow
> Sent: Sunday, May 26, 2013 10:36 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] I've got a candidate for a photo story.
>
>
>
>
>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, May 26, 2013 4:43 PM
> Subject: [DrakeRadio] I've got a candidate for a photo
> story.
>
>> That T-4X that my son chased all over Asheville arrived on
>> my doorstep last week. Cosmetically, it's about a 7/10.

>> The PTO shaft has an enormous amount of play and the meter
>> doesn't appear to be working or there's absolutely no idle
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> The PTO is the same problem I asked about several days
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> on the single ball that holds the back end of the shaft. If
> there is really a lot of play the ball may have fallen out.
> Its probably a standard size ball so if its missing one can
> be had from many hardware stores. Garey or someone probably
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> Lack of indication on the meter might be a bad meter,
> bad resistors in the measuring circuit, bad tubes (really no
> current). You should be able to isolate this with a plain
> VOM. I would start with the meter with the set turned off.
> If it deflects with the ohm meter put across it its OK. You
> can check the tubes for current by measuring the drop across
> the cathode resistors. Of course check the power supply. I
> am assuming this TX is similar to the T4XB.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

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13976. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 14:26:38 UTC
From: Garey Barrell
Topic: 13970 Message: 13976

Steve -

Unfortunately some feel that the BAND switch is too hard to turn and think they'll fix it by prying up on the flat spring steel 'donut' on
the detent at the back end. Once 'sprung', not much that can be done with it. It CANbe replaced with a donor detent/shaft.

PA tubes can fail to ZERO idle current, often as a result of losing Plate voltage. The Screen tries to BE the Plate, and 'poof'. Obviously
RFC2, R38 or Meter switch are all suspects. You can check the meter with a DMM, should be ~ 3 mA fs, and ~440 ohms. Do NOT check with a
VOM, too much current on the low ohms scales.

Looking foward to your 'photo essay'!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> That T-4X that my son chased all over Asheville arrived on my doorstep last week. Cosmetically, it's about a 7/10. The PTO shaft has an enormous amount of play and the meter doesn't appear to be working or there's absolutely no idle current. The PTO and premixer are working. There's very little detent in the band switch. I see the ball bearing is there, so anyone got any suggestions on bringing back some positive detent?
>
> This should be a good candidate for me to document with photos as I bring it back to life.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13977. Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 14:42:19 UTC
From: Gary
Topic: 13941 Message: 13977

C126 went bad in my early 13-tube R-4A years ago.
It was purely mechanical, one of the leads lost contact with the cap
itself. In my case, the receiver worked fine after it was well warmed
up but during warm up, the gain of the the whole receiver would go up
and down with a "click". Muting via the ON or PTT would cause a
transient that would get connection for a few more seconds/minutes.
Darn thing bugged me for years! A Radio Shack replacement worked fine.
73,
Gary
WB6OGD
--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, May 25, 2013 4:54 PM
> Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
> scores again!
>
>
> > Just to "recap" (sorry!).
> >
> > The problem I had with my R-4B was due to a bad capacitor
> > C126. This cap sits in the plate circuit of V4, right at
> > the input of the PBT circuit. It was apparently open, as
> > removing it from the circuit did not change the symptoms.
> >
> > Symptoms were a lack of responsiveness of the S-meter,
> > severe attenuation (2-3 S-units) of the signal at the 400
> > Hz setting and an inability to peak the top-left coil in
> > the slug rack when doing the PBT alignment. The other 3
> > coils peaked as they should.
> >
> > This capacitor is a metal-film part and is located near
> > the power supply, on a small board (Garey's CD calls it
> > out as Board 7). Mine was a black plastic part but I've
> > seen pics of the yellow cylinders as well. New parts are
> > shaped more like silver mica parts and are much smaller.
> > Replacements for this cap are available at Radio Shack.
> > Steve Wedge, W1ES/4
> >
>
> If you have means to test this cap it would be
> interesting to know what happened to it. Its a bypass cap

> on a B+ line that feeds the plates of the in put and output
> amps of the tunable IF plus the line goes to a couple of the
> IF screens. I think the S-meter reads the difference in
> current between the screens and plates. If its leaky it
> could pull the voltage down, if open of has a high ESR it
> could allow feedback through the line. I am not sure I
> would have spotted this on my own.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

13978. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 14:49:33 UTC
From: Garey Barrell
Topic: 13941 Message: 13978

Gary -

Good reference point. I think that may be what is wrong with Steve's unit as well. Just an'open' cap. Possibly a weak point in the design
of the capacitor, or someone got too aggressive with the pliers at installation. Maybe cut the lead a tiny bit short and 'stretched' it to
reach! :-)

Over the years I have found those capacitors to be excellent quality, and I can't remember a failure from 'leakage' or shorting.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Gary wrote:
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> itself. In my case, the receiver worked fine after it was well warmed
> up but during warm up, the gain of the the whole receiver would go up
> and down with a "click". Muting via the ON or PTT would cause a
> transient that would get connection for a few more seconds/minutes.
> Darn thing bugged me for years! A Radio Shack replacement worked fine.
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> WB6OGD
> --- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
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>> ----- Original Message -----
>> From: "Steve Wedge" <w1es1982@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Saturday, May 25, 2013 4:54 PM
>> Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
>> scores again!
>>
>>
>>> Just to "recap" (sorry!).
>>>
>>> The problem I had with my R-4B was due to a bad capacitor
>>> C126. This cap sits in the plate circuit of V4, right at
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>>> removing it from the circuit did not change the symptoms.
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>>> severe attenuation (2-3 S-units) of the signal at the 400
>>> Hz setting and an inability to peak the top-left coil in
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>>> coils peaked as they should.
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>>> This capacitor is a metal-film part and is located near
>>> the power supply, on a small board (Garey's CD calls it
>>> out as Board 7). Mine was a black plastic part but I've
>>> seen pics of the yellow cylinders as well. New parts are
>>> shaped more like silver mica parts and are much smaller.
>>> Replacements for this cap are available at Radio Shack.
>>> Steve Wedge, W1ES/4
>>>
>> If you have means to test this cap it would be
>> interesting to know what happened to it. Its a bypass cap
>> on a B+ line that feeds the plates of the in put and output
>> amps of the tunable IF plus the line goes to a couple of the
>> IF screens. I think the S-meter reads the difference in
>> current between the screens and plates. If its leaky it
>> could pull the voltage down, if open of has a high ESR it
>> could allow feedback through the line. I am not sure I
>> would have spotted this on my own.
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>>

13979. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 16:25:20 UTC
From: Steve Wedge
Topic: 13970 Message: 13979

Oh, yes - I've adjusted my share of them and have had the bearings fall out before. I have started using moly grease for these - the same stuff that's used for CV joints - after cleaning out all the old grease.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, May 27, 2013 10:17 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

Steve -

Sounds like fun!!! :-)

Balls are all 1/8" steel, Ace or True Value, usually in the little yellow boxes back in the fastener section.

Should be 10 in front, and one at the back. Allen wrench is 3/32".

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.
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> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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>
> From: Richard Knoppow
> Sent: Sunday, May 26, 2013 10:36 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

>
>
>
>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, May 26, 2013 4:43 PM
> Subject: [DrakeRadio] I've got a candidate for a photo
> story.
>
>> That T-4X that my son chased all over Asheville arrived on
>> my doorstep last week. Cosmetically, it's about a 7/10.
>> The PTO shaft has an enormous amount of play and the meter
>> doesn't appear to be working or there's absolutely no idle
>> current. The PTO and premixer are working. There's very
>> little detent in the band switch. I see the ball bearing
>> is there, so anyone got any suggestions on bringing back
>> some positive detent?
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>> wisdom appended thereto.
> Try cleaning the switch and lubricating the detent
> first. I don't remember exactly how this switch is
> constructed but most have a sort of scalloped surface the
> ball runs in and a spring to load the ball. If the spring is
> weak the detent action will be weak.
> The PTO is the same problem I asked about several days
> ago, there is an Allen head screw that adjusts the loading
> on the single ball that holds the back end of the shaft. If
> there is really a lot of play the ball may have fallen out.
> Its probably a standard size ball so if its missing one can
> be had from many hardware stores. Garey or someone probably
> knows the size.
> Lack of indication on the meter might be a bad meter,
> bad resistors in the measuring circuit, bad tubes (really no
> current). You should be able to isolate this with a plain
> VOM. I would start with the meter with the set turned off.
> If it deflects with the ohm meter put across it its OK. You
> can check the tubes for current by measuring the drop across
> the cathode resistors. Of course check the power supply. I
> am assuming this TX is similar to the T4XB.

>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

13980. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 16:26:40 UTC
From: Steve Wedge
Topic: 13941 Message: 13980

I still have the old part if anyone on here wants to analyze it. I no longer have access to a capacitor tester...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Gary
Sent: Monday, May 27, 2013 10:42 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

C126 went bad in my early 13-tube R-4A years ago.
It was purely mechanical, one of the leads lost contact with the cap
itself. In my case, the receiver worked fine after it was well warmed
up but during warm up, the gain of the the whole receiver would go up
and down with a "click". Muting via the ON or PTT would cause a
transient that would get connection for a few more seconds/minutes.
Darn thing bugged me for years! A Radio Shack replacement worked fine.
73,
Gary
WB6OGD
--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Saturday, May 25, 2013 4:54 PM
> Subject: Re: [DrakeRadio] R-4B PBT issue resolved - Garey
> scores again!
>
>
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> >
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> could pull the voltage down, if open of has a high ESR it
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> would have spotted this on my own.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

[Non-text portions of this message have been removed]

13981. Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 16:28:36 UTC
From: w2dsb
Topic: 13981 Message: 13981

I have been reading the mail for some time. Tried searching this topic, but no luck. I have a general idea what to do. Just looking for some pointers. I have been told to connect the device to a variac and bring the voltage up slow. I do not know what effect this would have on the tube filaments? Also how helpful is an ESR meter? Thanks in advance.

73, Bob

13982. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 16:49:47 UTC
From: Steve Wedge
Topic: 13981 Message: 13982

Hi, Bob -

You can bring it up slowly - the jury is out on how slowly you need to go. I recommend a Variac with a current meter so that you can shut down if the current is excessive. I usually bring old unused equipment up over the space of about an hour. Some folks feel a few days are needed.

Most of these Drake rigs are still working fine with their original electrolytic caps installed, but it you hear any sort of hum on the signal, it's time to change them. My own station equipment has been re-capped. It's cheap insurance against an old cap shorting out and taking the power transformer with it. I had that happen once with a Hallicrafters SX-70 and it filled my shack with smoke while I was upstairs having supper. Naturally, the receiver became junk after that. Darn thing almost caught on fire!

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w2dsb
Sent: Monday, May 27, 2013 12:28 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Restoring vacuum tube equipment after long storage.

I have been reading the mail for some time. Tried searching this topic, but no luck. I have a general idea what to do. Just looking for some pointers. I have been told to connect the device to a variac and bring the voltage up slow. I do not know what effect this would have on the tube filaments? Also how helpful is an ESR meter? Thanks in advance.

73, Bob

[Non-text portions of this message have been removed]

13983. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 17:06:14 UTC
From: Garey Barrell
Topic: 13981 Message: 13983

Bob -

I venture to say you'll get about four more answers than you get responses!!

The 'Start at 0 and raise theprimary voltage five volts every 12 hours' idea is, to meat least, ludicrous.

My process is as follows.

Careful inspection, inside and out, for any obvious problems. Spiders, dead mice, old nests, broken or missing tubes, wire ends hanging in
space, etc. Go through with screwdriver and put it on every mounting and grounding screw to test for tightness. Replace any broken ones. Be
SURE the _correct_ fuse is in the holder!

I have an ESR meter, a good 'Blue' from Australia, but the Chinese digital knock-offs for $10 on eBay probably work. It's not a precise
test, more of a 'GO-NO-GO', as very few electrolytics test 'marginal'. They're either fine, or they're dead. A quick, in-circuit test
validates or condemns all the electrolytics pretty quickly.

Then bring out the 'light bulb' test box. This is just a box with a regular light bulb, (chosen to approximate the power requirements of the
radio,) wired in series with the AC line, and a switch to bypassit. Plug it in and plug the new radio into it, and turn it on. The bulb
should flash brightly for a few seconds, and then dim out as the initial inrush current to the filter caps and filaments charge/heat up. IF
however the bulb STAYS bright, or dims only slightly, you have either a power supply or power transformer problem. Voltage measurements of
those areas with the bulb still in circuit will usually allow you to find the short. You'll read greatly reduced voltages, down to zero
volts on the shorted component, or NO voltages at all, indicating either a shorted power transformer or fuseholder, or line bypass cap, or
power cord, or... If the bulb does dim down, I usually let it run for 30 minutes or so with the bulb in circuit, staying in the general
area. Then flip the switch and the radio will most likely operate fine, or at least well enough for you to troubleshoot minor problems such
as bad tubes, open or shorted bypass caps, etc...

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w2dsb wrote:

> I have been reading the mail for some time. Tried searching this topic, but no luck. I have a general idea what to do. Just looking for some pointers. I have been told to connect the device to a variac and bring the voltage up slow. I do not know what effect this would have on the tube filaments? Also how helpful is an ESR meter? Thanks in advance.
>
> 73, Bob
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> Yahoo! Groups Links
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13984. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 17:06:18 UTC
From: Richard Knoppow
Topic: 13941 Message: 13984

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 27, 2013 9:26 AM
Subject: Re: [DrakeRadio] Re: R-4B PBT issue resolved -
Garey scores again!

>I still have the old part if anyone on here wants to
>analyze it. I no longer have access to a capacitor
>tester...
>
> Steve Wedge, W1ES/4

If its open an ohm meter will tell you. Except for very
low value caps you can see the cap charge up on the meter.
If you are not sure then reverse the leads and see if it
kicks.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

13985. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 17:12:35 UTC
From: Paul Kraemer
Topic: 13981 Message: 13985

I second that motion! And I might add, an ohmmeter check first for any obvious shorts or leakage is a great place to start!
The variac with a current meter and it is most a matter of SWAG, gut feel, and intuition as to how fast is too fast. I start at about 50vac and sometimes take days to get to 120vac. Sometimes an hour or two. Depends on the age of the piece, power rating and how the current behaves. Linear amps I do the tube filament cook seperate from the hv section. Burn in the tubes real good (days) before adding the plate voltage which was done seperately with the tubes removed.
An awfully lot of the capacitors I routinely replace test as good or better on the esr meter than the new variety but as Steve says---cheap insurance.
And, of course, if it involves an AC-3, AC-4 or L-4PS I'd like to help you with that with a nice rebuild kit
Respectfully
Paul K0UYA
Electronic Specialties and soon (working on it) to be www.radiohamshack.com

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, May 27, 2013 11:49 AM
Subject: Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

> Hi, Bob -
>
> You can bring it up slowly - the jury is out on how slowly you need to go.
> I recommend a Variac with a current meter so that you can shut down if the
> current is excessive. I usually bring old unused equipment up over the
> space of about an hour. Some folks feel a few days are needed.
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> thing almost caught on fire!
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> From: w2dsb
> Sent: Monday, May 27, 2013 12:28 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Restoring vacuum tube equipment after long storage.
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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13986. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 18:42:09 UTC
From: Bernie
Topic: 13970 Message: 13986

As for the detent on the bandswitch...you might try finding just a little bit bigger ball bearing to slip in there in place of the one that;'s there, especially of the spring donut has been "sprung".

Bernie

----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Monday, May 27, 2013 9:11 AM
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Richard Knoppow
Sent: Sunday, May 26, 2013 10:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 26, 2013 4:43 PM
Subject: [DrakeRadio] I've got a candidate for a photo
story.

> That T-4X that my son chased all over Asheville arrived on
> my doorstep last week. Cosmetically, it's about a 7/10.
> The PTO shaft has an enormous amount of play and the meter
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first. I don't remember exactly how this switch is
constructed but most have a sort of scalloped surface the
ball runs in and a spring to load the ball. If the spring is
weak the detent action will be weak.
The PTO is the same problem I asked about several days
ago, there is an Allen head screw that adjusts the loading
on the single ball that holds the back end of the shaft. If
there is really a lot of play the ball may have fallen out.
Its probably a standard size ball so if its missing one can
be had from many hardware stores. Garey or someone probably
knows the size.
Lack of indication on the meter might be a bad meter,
bad resistors in the measuring circuit, bad tubes (really no
current). You should be able to isolate this with a plain
VOM. I would start with the meter with the set turned off.
If it deflects with the ohm meter put across it its OK. You
can check the tubes for current by measuring the drop across
the cathode resistors. Of course check the power supply. I
am assuming this TX is similar to the T4XB.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

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13987. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 18:49:19 UTC
From: Chris Musselman
Topic: 13981 Message: 13987

Bob-

I have done several complete restorations of radios and TV sets from the 1940s through 1960s, as well as years of testing and repair of newer but heavily-used equipment. I approach things in terms of long-term reliability rather than just basic repairs. I would divide things roughly into three eras: 1950s and older, 1960s, and 1970s and newer. The oldest group has mostly or all wax-paper capacitors, and I replace EVERY one of those as well as EVERY electrolytic capacitor, before even plugging the device in. 1970s and newer (solid-state) devices have much more reliable parts in general and few if any parts of this age need to be replaced before a first power-up. 1960s equipment (or newer tube-type) is in between, and that is where many Drake radios fit in. This group also has mostly reliable parts, but the electrolytic capacitors are old enough (and can cause enough damage if they are bad) that I would consider replacing all of them as well (definitely the big ones in the power supply), right from the start.

After the advance repairs, I power up a device using a current meter in the AC power line to watch for immediate problems. (The "light bulb" device is for a similar purpose.) If I wanted to be REALLY careful, I might use a variable AC transformer (Variac or similar) and ramp up the voltage while watching the AC current, over a few-minute period. NOT spread out over hours, much less days(!). Then, just fix whatever problems appear by normal methods.

I believe the "slow Variac" people are trying/hoping to "re-form" old electrolytic capacitors with the gradual increases of voltage into them. I would never bother doing this. Even if any electrolytics are "saved" by this method, they can still go bad again (including shorting) at any time in the future, maybe taking the power transformer or other parts with them. It is just not worth the bother or risk, in my opinion.

I use an ESR meter constantly when repairing newer devices whose electrolytic capacitors go bad from the heat of 24-hour operation, but on older equipment, there are fewer of them in the first place (and maybe they should all be replaced anyway as mentioned above). I have never used my ESR meter on a tube-type device.

73-

Chris W6ATV

On 5/27/2013 9:28 AM, w2dsb wrote:
> I have been reading the mail for some time. Tried searching this
> topic, but no luck. I have a general idea what to do. Just looking
> for some pointers. I have been told to connect the device to a variac

> and bring the voltage up slow. I do not know what effect this would
> have on the tube filaments? Also how helpful is an ESR meter? Thanks
> in advance.
>
> 73, Bob
>

13988. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 19:07:09 UTC
From: Steve Wedge
Topic: 13970 Message: 13988

I like that idea, Bernie. Thanks.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Bernie
Sent: Monday, May 27, 2013 2:42 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

As for the detent on the bandswitch...you might try finding just a little bit bigger ball bearing to slip in there in place of the one that;'s there, especially of the spring donut has been "sprung".

Bernie

----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Monday, May 27, 2013 9:11 AM
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.

Steve Wedge, W1ES/4

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From: Richard Knoppow
Sent: Sunday, May 26, 2013 10:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 26, 2013 4:43 PM
Subject: [DrakeRadio] I've got a candidate for a photo
story.

> That T-4X that my son chased all over Asheville arrived on
> my doorstep last week. Cosmetically, it's about a 7/10.

> The PTO shaft has an enormous amount of play and the meter
> doesn't appear to be working or there's absolutely no idle
> current. The PTO and premixer are working. There's very
> little detent in the band switch. I see the ball bearing
> is there, so anyone got any suggestions on bringing back
> some positive detent?
>
> This should be a good candidate for me to document with
> photos as I bring it back to life.
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Try cleaning the switch and lubricating the detent
first. I don't remember exactly how this switch is
constructed but most have a sort of scalloped surface the
ball runs in and a spring to load the ball. If the spring is
weak the detent action will be weak.
The PTO is the same problem I asked about several days
ago, there is an Allen head screw that adjusts the loading
on the single ball that holds the back end of the shaft. If
there is really a lot of play the ball may have fallen out.
Its probably a standard size ball so if its missing one can
be had from many hardware stores. Garey or someone probably
knows the size.
Lack of indication on the meter might be a bad meter,
bad resistors in the measuring circuit, bad tubes (really no
current). You should be able to isolate this with a plain
VOM. I would start with the meter with the set turned off.
If it deflects with the ohm meter put across it its OK. You
can check the tubes for current by measuring the drop across
the cathode resistors. Of course check the power supply. I
am assuming this TX is similar to the T4XB.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

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13989. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 19:16:35 UTC
From: Jim Shorney
Topic: 13981 Message: 13989

On Mon, 27 May 2013 12:49:47 -0400, Steve Wedge wrote:

> It's cheap insurance against an old cap shorting out and taking the power transformer with it. I had that happen once with a Hallicrafters SX-70 and it filled my shack with smoke while I was upstairs having supper. Naturally, the receiver became junk after that. Darn thing almost caught on fire!

Hence my rule to never leave vintage equipment running unattended - even for a minute or two.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

13990. Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 19:45:44 UTC
From: fred
Topic: 13941 Message: 13990

Steve
if you are interested in analizing the cap I can do it . with small capacitors like that there are onlt 2 tests , value and leakage/shorts
You can test for shorts with any VOM . metal film caps rarely short so it is most likely open . a.01 is too small to test for metre kick with a VOM . I still have the LC103 from when I ran a TV repair business .
Andrew
kd5pnt

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Yes, it was C126. The S-meter is now also much more sensitive than it was, too.
>
> I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!
>
> I'll have spares, anyway.
>
> It's sitting in place of my station R-4B and now I have a tough decision to make.
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> Steve Wedge, W1ES/4
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> [Non-text portions of this message have been removed]
>

13991. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 19:53:00 UTC
From: Garey Barrell
Topic: 13941 Message: 13991

The cap in question is a 0.1 uF. Should be easy to see on any analog VOM, and probably on a DMM as well by reversing the leads. I bet
it's open!! Who's got the pool???

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

fred wrote:
> Steve
> if you are interested in analizing the cap I can do it . with small capacitors like that there are onlt 2 tests , value and leakage/shorts
> You can test for shorts with any VOM . metal film caps rarely short so it is most likely open . a.01 is too small to test for metre kick with a VOM . I still have the LC103 from when I ran a TV repair business .
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> kd5pnt
>
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> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
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>> I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!
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13992. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 21:37:46 UTC
From: Steve Wedge
Topic: 13981 Message: 13992

...unless it has been re-capped

Steve Wedge, W1ES/4

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From: Jim Shorney
Sent: Monday, May 27, 2013 3:16 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

On Mon, 27 May 2013 12:49:47 -0400, Steve Wedge wrote:

> It's cheap insurance against an old cap shorting out and taking the power transformer with it. I had that happen once with a Hallicrafters SX-70 and it filled my shack with smoke while I was upstairs having supper. Naturally, the receiver became junk after that. Darn thing almost caught on fire!

Hence my rule to never leave vintage equipment running unattended - even for a minute or two.

73

-Jim
NU0C

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[Non-text portions of this message have been removed]

13993. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 21:50:09 UTC
From: Jim Shorney
Topic: 13981 Message: 13993

EVEIN IF it has been re-capped. :D Plenty of other things can fail, too.

The exception that I make is for my 7-Line. I've been known to leave it on for days at a time, but then, it doesn't have tubes and high voltage.

73

-Jim
NU0C

On Mon, 27 May 2013 17:37:46 -0400, Steve Wedge wrote:

>...unless it has been re-capped
>
>Steve Wedge, W1ES/4
>
>Time flies like an arrow; fruit flies like a banana.
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>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.
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>-Jim
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>
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

13994. R-4B Switcheroo!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 21:52:33 UTC
From: Steve Wedge
Topic: 13994 Message: 13994

I took the covers off both R-4B's and have changed my mind. I'm going to sell the one I just finished. The main reason is the late s/n of the one I've had in my station, the fact that it has the same drift suffix as my transmitter and, most importantly to me, it has the G-10 boards instead of phenolic. Only two boards in my station receiver are phenolic and all the rest are G-10.

So, here's what I've got - and the price will be about the same because otherwise, it was hair-splitting.

R-4B, serial 13533B. Chassis is decent but not pristine - about 75th percentile. Only real corrosion is under the PBT, for some reason. Bottom cover nice but no silkscreen, top cover decent but very minor dents in two places where equipment was stacked on top of it at one time. Front panel is excellent with a couple of small scratches in the PTO window that can be seen if you look really carefully. Knobs are like new. No holes, no mods. Plays just like new.

I re-capped this set with the Hayseed kit. I replaced all the 12BA6's and the 6BZ6, plus C126 (natch!). This set was disassembled and thoroughly cleaned. After cleaning, it got re-assembled, new lube on the PTO bearings and the PBT, as well as oil drops at other moving parts (NOT the ball-drive!). Some Cramolin went onto the switch contacts to clean them up. The set was aligned and I ran it with my T-4XB at W1ES over the weekend. If you A/B'ed this and my other R-4B, you could not tell the difference.

I now have pictures available of this set. I'll let it sit for a couple of days before going to auction, in case anyone from the group is interested. Please contact me off-list for details and photos.

73,

Steve Wedge, W1ES/4

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[Non-text portions of this message have been removed]

13995. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 21:55:42 UTC
From: Steve Wedge
Topic: 13941 Message: 13995

Thanks, Fred. I've been trolling around eBay and it looks like I may join the 21st century and buy an inexpensive LCR meter plus an inexpensive ESR meter. I see that there's a guy in VE who is selling the latter for around 40 bucks, ID'ed as a Model 2501A ESR Meter. Anyone work with these who could comment? I like the idea of this, as I can use it in-circuit to ID sets that really need to be re-capped.

Steve Wedge, W1ES/4

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From: fred
Sent: Monday, May 27, 2013 3:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Steve
if you are interested in analizing the cap I can do it . with small capacitors like that there are onlt 2 tests , value and leakage/shorts
You can test for shorts with any VOM . metal film caps rarely short so it is most likely open . a.01 is too small to test for metre kick with a VOM . I still have the LC103 from when I ran a TV repair business .
Andrew
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--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Yes, it was C126. The S-meter is now also much more sensitive than it was, too.
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> I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!
>
> I'll have spares, anyway.
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> It's sitting in place of my station R-4B and now I have a tough decision to make.
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> [Non-text portions of this message have been removed]

>

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13996. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 21:57:55 UTC
From: Steve Wedge
Topic: 13941 Message: 13996

It's acting open with my Fluke 8024B, all ranges. Since the circuit didn't behave any differently when I removed the cap, I'm betting on open, too.

Steve Wedge, W1ES/4

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From: Garey Barrell
Sent: Monday, May 27, 2013 3:53 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

The cap in question is a 0.1 uF. Should be easy to see on any analog VOM, and probably on a DMM as well by reversing the leads. I bet
it's open!! Who's got the pool???

73, Garey - K4OAH
Glen Allen, VA

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13997. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 22:36:19 UTC
From: William Houghton
Topic: 13970 Message: 13997

Steve,

Are you sure all 10 of the ball bearings are in the PTO race?

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, May 27, 2013 7:11:45 AM
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

Yup - it's going to be a bunch of repairs, and that's why I'll document it. I have NEVER seen a PTO this loose! I'm surprised the ball bearings are still in there.

Steve Wedge, W1ES/4

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From: Richard Knoppow
Sent: Sunday, May 26, 2013 10:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, May 26, 2013 4:43 PM
Subject: [DrakeRadio] I've got a candidate for a photo story.

> That T-4X that my son chased all over Asheville arrived on
> my doorstep last week. Cosmetically, it's about a 7/10.
> The PTO shaft has an enormous amount of play and the meter
> doesn't appear to be working or there's absolutely no idle
> current. The PTO and premixer are working. There's very
> little detent in the band switch. I see the ball bearing
> is there, so anyone got any suggestions on bringing back
> some positive detent?
>
> This should be a good candidate for me to document with
> photos as I bring it back to life.
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>

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Try cleaning the switch and lubricating the detent
first. I don't remember exactly how this switch is
constructed but most have a sort of scalloped surface the
ball runs in and a spring to load the ball. If the spring is
weak the detent action will be weak.
The PTO is the same problem I asked about several days
ago, there is an Allen head screw that adjusts the loading
on the single ball that holds the back end of the shaft. If
there is really a lot of play the ball may have fallen out.
Its probably a standard size ball so if its missing one can
be had from many hardware stores. Garey or someone probably
knows the size.
Lack of indication on the meter might be a bad meter,
bad resistors in the measuring circuit, bad tubes (really no
current). You should be able to isolate this with a plain
VOM. I would start with the meter with the set turned off.
If it deflects with the ohm meter put across it its OK. You
can check the tubes for current by measuring the drop across
the cathode resistors. Of course check the power supply. I
am assuming this TX is similar to the T4XB.

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Richard Knoppow
Los Angeles
WB6KBL
dickburk@ix.netcom.com

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13998. Re: [DrakeRadio] I've got a candidate for a photo story.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-27 23:39:00 UTC
From: Steve Wedge
Topic: 13970 Message: 13998

I did a couple of quick inspections today. My R-4B for some reason had an "A" top cover. As luck would have it, this T-4X had a "B" top cover. A little cleaning, a little Mother's car way and - voila! Two rigs with problem covers no longer have problem covers

It appears all of the balls are present in the race. While I was dubbin' around in there, I took my trusty Fluke 8024, put it on diode check and touched the meter terminals. Nothing. That explains the "no idle current" part.

I just bought some 6JB6's for a good price on eBay and am waiting for those. I know I have at least one transmitter that's going to need them. This T-4X is cosmetically very nice but is going to take some work to get up to scratch.

I have to decide if this one's next, or the R-4C. The R-4C is as deaf as a haddock - only the strongest signals are copyable and I'm hoping it's NOT the roofing filter that's to blame. I don't have any other filters in it, so can't check that way.

My station R-4B is sitting here, chugging along on 17m, listening to a fine opening to EU. I did a little more cleaning of the bandswitch contacts today and I no longer have to jiggle the bandswitch to get strappin' signals! (I'd just been too lazy to do this until today - when I removed the covers to decide which R-4B to sell).

Anyway, when I start on the T-4X, I'll start shooting some phone pix.

Steve Wedge, W1ES/4

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From: William Houghton
Sent: Monday, May 27, 2013 6:36 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] I've got a candidate for a photo story.

Steve,

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To: DrakeRadio@yahoogroups.com
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13999. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 02:06:55 UTC
From: Garey Barrell
Topic: 13981 Message: 13999

I had three 4-Line sets running 24/7 for almost sixyears in the 70's in autostart RTTY. 170 shift on 14.075. There were about six of us.
One of the group was Irv Hoff, W6FFC. He was a Captain for United Air Lines, based in CA, and I was working with NASA in Huntsville, AL.
90% of our communication was via RTTY and 'time shifted) as we were never around at the same time.... Irv was a prolific typist, and could
type for hours at the 60 WPM speed we were using. I'd come home from work and there'd be paper ALL over the floor, literally. I finally
got a paper winder on the back of my M-28 ASR in self defense. One of our projects was the NAVMARCORMARS CATC system. It was designed to
route military traffic by decoding callsigns and routing through various stations. Sort of an early packet system!

Irv designed a series of RTTY converters, published in QST, over several years. The last was the ST-6, which in spite of my efforts to
convince him otherwise, ended up with a 'parent board' across the back with about 6-8 plug-in cards. Sound familiar?!??! Of course the
backplane was hand wired, and a real dog. So when we needed a converter for the CATC (Computer Automated Traffic Control) I put the whole
thing on a single 6" x 6" PC board, just to prove my point. We used that and published it in HR, even sold a few kits. CATC never took
off, all that TTL SSI logic just got to be too much for the digital. We had the only common suffix MARS calls ever issued, K4OAH was N0OAH.

OH, got distracted. I had a single failure in the 4-Lines over that time. One 12BY7 filament opened up. This was running RTTY at full
power (AFSK/SSB) with small fans on each R-4(any) and T-4X(any).

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> EVEIN IF it has been re-capped. :D Plenty of other things can fail, too.
>
> The exception that I make is for my 7-Line. I've been known to leave it on for
> days at a time, but then, it doesn't have tubes and high voltage.
>
> 73
>
> -Jim
> NU0C
>

> On Mon, 27 May 2013 17:37:46 -0400, Steve Wedge wrote:
>
>> ...unless it has been re-capped
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>>
>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
>>
>>
>> From: Jim Shorney
>> Sent: Monday, May 27, 2013 3:16 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.
>>
>>
>>
>> On Mon, 27 May 2013 12:49:47 -0400, Steve Wedge wrote:
>>
>>> It's cheap insurance against an old cap shorting out and taking the power transformer with it. I had that happen once with a Hallicrafters SX-70 and it filled my shack with smoke while I was upstairs having supper. Naturally, the receiver became junk after that. Darn thing almost caught on fire!
>> Hence my rule to never leave vintage equipment running unattended - even for a
>> minute or two.
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>> --
>> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"
>>
>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
>>
>>
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain

3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
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> Yahoo! Groups Links
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>

14000. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 02:15:20 UTC
From: Steve Wedge
Topic: 13981 Message: 14000

Great story, Garey.

Actually, the most catastrophic electronics failure I have ever witnessed was in the power system of a DECSystem-20, back in 1977 or '78. There was a three-phase, 12V @ 390A power supply (using ferroresonant transformers) that fed the regulator banks for the ECL logic. The machines were supposed to be PM'ed periodically, but this one missed out, apparently. One of the things that needed to be done in the PM was to re-tighten the heavy cables that ran from that raw supply to the 3-farad capacitor bank. Well, vibration had loosened enough of the 1/2" kep nuts (yes - half inch!) that the thing was sitting there arcing and heating up. It finally caught fire one morning and one of those 100 lb. CO2 extinguishers-on-wheels was emptied into it.

This computer was used as a tester for other DECSystem-20 products and so was capital equipment. It took three of us a couple of days to get everything re-built. Low voltage, high-current.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, May 27, 2013 10:06 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

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Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>
>> [Non-text portions of this message have been removed]
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> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14001. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 03:04:32 UTC
From: Gary Woods
Topic: 13981 Message: 14001

On Mon, 27 May 2013 22:15:20 -0400, you wrote:

>Actually, the most catastrophic electronics failure I have ever witnessed was in the power system of a DECSystem-20, back in 1977 or '78.

We had something similar, but not as spectacular: A video frame synchronizer (Holy Cow! They can put a WHOLE FRAME of video in 16 boards full of 4K ram))
Switching supply; 5V @60A, and one of the bypasses failed. Struck an arc and burned a 2" hole in the memory board. We don't need no steenkin' fuses on each board!

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

14002. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 05:11:32 UTC
From: Jim Shorney
Topic: 13981 Message: 14002

On Mon, 27 May 2013 22:06:55 -0400, Garey Barrell wrote:

>
>OH, got distracted. I had a single failure in the 4-Lines over that time. One 12BY7 filament opened up. This was running RTTY at full
>power (AFSK/SSB) with small fans on each R-4(any) and T-4X(any).

Yes, but the radios (among other things) were much younger then. Given the age of the radios now, and the scarcity of some of the components, I don't leave tube gear running unattended. The 7-Line is a different story, I frequently leave it run for extended periods.

73

-Jim
NU0C
--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14003. Re: Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 12:37:24 UTC
From: rwilson@...
Topic: 13981 Message: 14003

The 14.075 RTTY autostart operation was quite interesting to me at the time. With a homemade ST6 built on perf board and a Drake 2A receiver I would also have piles of paper on the floor after coming home from work. By the way Gary, I was also working at Marshall at the time and living in Decatur, AL.
I was in Navy MARS at the time and would pick up traffic from the 6th Navel District RTTY net in the afternoon to the Alabama net in the evening. The Navy would send up paper 12 rolls at a time.
Bob
WA4ZZW Decatur, AL

14004. Drake Equipment For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 11:23:51 UTC
From: white512
Topic: 9132 Message: 14004

TR7 - early serial number with PS-7 $600
MN2700 Tuner $200
L7 Amplifier with PS $900
RV7 VFO $200
Drake Desk mic - $50
Service Manual - $20

All with original manuals - price is less shipping

From Estate of W5ALI - All proceeds go to his XYL

14005. Re: [DrakeRadio] Drake Equipment For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 14:00:58 UTC
From: Joe - W7RKN
Topic: 9132 Message: 14005

Where is the equipment located? Texas?

Joe - W7RKN

----- Original Message -----
From: "white512" <white512@...>
Subject: [DrakeRadio] Drake Equipment For Sale

> TR7 - early serial number with PS-7 $600
> MN2700 Tuner $200
> L7 Amplifier with PS $900
> RV7 VFO $200
> Drake Desk mic - $50
> Service Manual - $20
>
> All with original manuals - price is less shipping
>
> From Estate of W5ALI - All proceeds go to his XYL
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

14006. Re: [DrakeRadio] Drake Equipment For Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-28 14:07:46 UTC
From: Gary
Topic: 9132 Message: 14006

On 5/28/2013 9:00 AM, Joe - W7RKN wrote:
>
> Where is the equipment located? Texas?
>
> Joe - W7RKN
>
> ----- Original Message -----
> From: "white512" <white512@...
> <mailto:white512%40austin.rr.com>>
> Subject: [DrakeRadio] Drake Equipment For Sale
>
> > TR7 - early serial number with PS-7 $600
> > MN2700 Tuner $200
> > L7 Amplifier with PS $900
> > RV7 VFO $200
> > Drake Desk mic - $50
> > Service Manual - $20
> >
> > All with original manuals - price is less shipping
> >
> > From Estate of W5ALI - All proceeds go to his XYL
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
>
>
Yes, very near Austin.

Interested?

Gary W5GW

[Non-text portions of this message have been removed]

14007. Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 03:27:14 UTC
From: Steve Wedge
Topic: 14007 Message: 14007

I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.

Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

14008. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 04:49:25 UTC
From: Mikey
Topic: 14007 Message: 14008

You ask good questions,Steve. I am gonna follow this thread closely,as i ve noticed a parallel here. Mike N9LSD

On Tue, May 28, 2013 11:27 PM EDT Steve Wedge wrote:

>I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>
>Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>
>Steve Wedge, W1ES/4
>Sent from my iPhone: PSE excuse any autocorrect faux pas :)

14009. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 05:03:18 UTC
From: Charles Ring
Topic: 14007 Message: 14009

On 5/28/2013 2327, Steve Wedge wrote:
>
> I've noticed that the plugin crystals - both the regular bands and
> accessories, seem to go bad a lot. I just sold one that was working,
> sent it in lots of bubble wrap and it was doa. I've got a pile of
> about half a dozen dead rocks from as many radios.
>
> Has anyone else noticed this sort of failure rate? These seem to be
> bad more than even tubes. Is it an age-related issue? Why don't the
> carrier oscillator xtals seem to go bad?
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> __ <!-- #ygrp-mkp { border: 1px solid #d8d8d8; font-family: Arial;
> margin: 10px 0; padding: 0 10px; } #ygrp-mkp hr { border: 1px solid
> #d8d8d8; } #ygrp-mkp #hd { color: #628c2a; font-size: 85%;
> font-weight: 700; line-height: 122%; margin: 10px 0; } #ygrp-mkp #ads
> { margin-bottom: 10px; } #ygrp-mkp .ad { padding: 0 0; } #ygrp-mkp .ad
> p { margin: 0; } #ygrp-mkp .ad a { color: #0000ff; text-decoration:
> none; } #ygrp-sponsor #ygrp-lc { font-family: Arial; } #ygrp-sponsor
> #ygrp-lc #hd { margin: 10px 0px; font-weight: 700; font-size: 78%;
> line-height: 122%; } #ygrp-sponsor #ygrp-lc .ad { margin-bottom: 10px;
> padding: 0 0; } #actions { font-family: Verdana; font-size: 11px;
> padding: 10px 0; } #activity { background-color: #e0ecee; float: left;
> font-family: Verdana; font-size: 10px; padding: 10px; } #activity span
> { font-weight: 700; } #activity span:first-child { text-transform:
> uppercase; } #activity span a { color: #5085b6; text-decoration: none;
> } #activity span span { color: #ff7900; } #activity span .underline {
> text-decoration: underline; } .attach { clear: both; display: table;
> font-family: Arial; font-size: 12px; padding: 10px 0; width: 400px; }
> .attach div a { text-decoration: none; } .attach img { border: none;
> padding-right: 5px; } .attach label { display: block; margin-bottom:
> 5px; } .attach label a { text-decoration: none; } blockquote { margin:
> 0 0 0 4px; } .bold { font-family: Arial; font-size: 13px; font-weight:
> 700; } .bold a { text-decoration: none; } dd.last p a { font-family:
> Verdana; font-weight: 700; } dd.last p span { margin-right: 10px;
> font-family: Verdana; font-weight: 700; } dd.last p span.yshortcuts {
> margin-right: 0; } div.attach-table div div a { text-decoration: none;
> } div.attach-table { width: 400px; } div.file-title a, div.file-title
> a:active, div.file-title a:hover, div.file-title a:visited {
> text-decoration: none; } div.photo-title a, div.photo-title a:active,
> div.photo-title a:hover, div.photo-title a:visited { text-decoration:
> none; } div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts { font-family:
> Verdana; font-size: 10px; font-weight: normal; } .green { color:

> #628c2a; } .MsoNormal { margin: 0 0 0 0; } o { font-size: 0; } #photos
> div { float: left; width: 72px; } #photos div div { border: 1px solid
> #666666; height: 62px; overflow: hidden; width: 62px; } #photos div
> label { color: #666666; font-size: 10px; overflow: hidden; text-align:
> center; white-space: nowrap; width: 64px; } #reco-category {
> font-size: 77%; } #reco-desc { font-size: 77%; } .replbq { margin:
> 4px; } #ygrp-actbar div a:first-child { /* border-right: 0px solid
> #000;*/ margin-right: 2px; padding-right: 5px; } #ygrp-mlmsg {
> font-size: 13px; font-family: Arial, helvetica,clean, sans-serif;
> *font-size: small; *font: x-small; } #ygrp-mlmsg table { font-size:
> inherit; font: 100%; } #ygrp-mlmsg select, input, textarea { font: 99%
> Arial, Helvetica, clean, sans-serif; } #ygrp-mlmsg pre, code {
> font:115% monospace; *font-size:100%; } #ygrp-mlmsg * { line-height:
> 1.22em; } #ygrp-mlmsg #logo { padding-bottom: 10px; } #ygrp-msg p a {
> font-family: Verdana; } #ygrp-msg p#attach-count span { color:
> #1E66AE; font-weight: 700; } #ygrp-reco #reco-head { color: #ff7900;
> font-weight: 700; } #ygrp-reco { margin-bottom: 20px; padding: 0px; }
> #ygrp-sponsor #ov li a { font-size: 130%; text-decoration: none; }
> #ygrp-sponsor #ov li { font-size: 77%; list-style-type: square;
> padding: 6px 0; } #ygrp-sponsor #ov ul { margin: 0; padding: 0 0 0
> 8px; } #ygrp-text { font-family: Georgia; } #ygrp-text p { margin: 0 0
> 1em 0; } #ygrp-text tt { font-size: 120%; } #ygrp-vital ul
> li:last-child { border-right: none !important; } -->
>

I've never had one fail in over 30 years of using Drakes.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

14010. Drake Equipment for Sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 11:50:39 UTC
From: Gary White
Topic: 14007 Message: 14010

The Drake equipment has been sold.

14011. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 13:23:14 UTC
From: Wes Bolin
Topic: 14007 Message: 14011

When I bought my 2B, it was used but working. I found three bad crystals that needed to be replaced. I concur with your conclusion.
Wes

From: Charles Ring <w3nu@...>
To: DrakeRadio@yahoogroups.com
Cc: Steve Wedge <w1es1982@...>
Sent: Wednesday, May 29, 2013 12:03 AM
Subject: Re: [DrakeRadio] Crystal reliability.

On 5/28/2013 2327, Steve Wedge wrote:
>
> I've noticed that the plugin crystals - both the regular bands and
> accessories, seem to go bad a lot. I just sold one that was working,
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> font-family: Arial; font-size: 12px; padding: 10px 0; width: 400px; }
> .attach div a { text-decoration: none; } .attach img { border: none;
> padding-right: 5px; } .attach label { display: block; margin-bottom:
> 5px; } .attach label a { text-decoration: none; } blockquote { margin:

> 0 0 0 4px; } .bold { font-family: Arial; font-size: 13px; font-weight:
> 700; } .bold a { text-decoration: none; } dd.last p a { font-family:
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> a:active, div.file-title a:hover, div.file-title a:visited {
> text-decoration: none; } div.photo-title a, div.photo-title a:active,
> div.photo-title a:hover, div.photo-title a:visited { text-decoration:
> none; } div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts { font-family:
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> #628c2a; } .MsoNormal { margin: 0 0 0 0; } o { font-size: 0; } #photos
> div { float: left; width: 72px; } #photos div div { border: 1px solid
> #666666; height: 62px; overflow: hidden; width: 62px; } #photos div
> label { color: #666666; font-size: 10px; overflow: hidden; text-align:
> center; white-space: nowrap; width: 64px; } #reco-category {
> font-size: 77%; } #reco-desc { font-size: 77%; } .replbq { margin:
> 4px; } #ygrp-actbar div a:first-child { /* border-right: 0px solid
> #000;*/ margin-right: 2px; padding-right: 5px; } #ygrp-mlmsg {
> font-size: 13px; font-family: Arial, helvetica,clean, sans-serif;
> *font-size: small; *font: x-small; } #ygrp-mlmsg table { font-size:
> inherit; font: 100%; } #ygrp-mlmsg select, input, textarea { font: 99%
> Arial, Helvetica, clean, sans-serif; } #ygrp-mlmsg pre, code {
> font:115% monospace; *font-size:100%; } #ygrp-mlmsg * { line-height:
> 1.22em; } #ygrp-mlmsg #logo { padding-bottom: 10px; } #ygrp-msg p a {
> font-family: Verdana; } #ygrp-msg p#attach-count span { color:
> #1E66AE; font-weight: 700; } #ygrp-reco #reco-head { color: #ff7900;
> font-weight: 700; } #ygrp-reco { margin-bottom: 20px; padding: 0px; }
> #ygrp-sponsor #ov li a { font-size: 130%; text-decoration: none; }
> #ygrp-sponsor #ov li { font-size: 77%; list-style-type: square;
> padding: 6px 0; } #ygrp-sponsor #ov ul { margin: 0; padding: 0 0 0
> 8px; } #ygrp-text { font-family: Georgia; } #ygrp-text p { margin: 0 0
> 1em 0; } #ygrp-text tt { font-size: 120%; } #ygrp-vital ul
> li:last-child { border-right: none !important; } -->
>

I've never had one fail in over 30 years of using Drakes.

--
Charles Ring W3NU

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14012. Re: Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 14:36:02 UTC
From: radiomanL
Topic: 14007 Message: 14012

maybe I've just been lucky , all my 2B and TR3 crystals are still working
andrew
kd5pnt

[Non-text portions of this message have been removed]

14013. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 13:40:14 UTC
From: Garey Barrell
Topic: 14007 Message: 14013

Steve -

That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.

As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>
> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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> Yahoo! Groups Links
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14014. Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 09:57:58 UTC
From: Mark
Topic: 13941 Message: 14014

Is there a similar capacitor in the R-4C?

I'm experiencing similar symptoms

73 Mark, PA5MW

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Yes, it was C126. The S-meter is now also much more sensitive than it was, too.
>
> I already ordered some 0.1 uf metal film caps from Digi-Key, but I should have checked out Radio Shack first: they actually stock a 0.1 uf, 250V metal film capacitor!
>
> I'll have spares, anyway.
>
> It's sitting in place of my station R-4B and now I have a tough decision to make.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
>

14015. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 09:16:09 UTC
From: Henry Vredegoor
Topic: 14007 Message: 14015

I think the crystals in the (older-?, 4x-Line?) Drake equipment are of the soldered can type.
I somewhere read a story that this process of sealing the cans is prone to failures over (longer) time caused by the fumes resulting from the soldering process.
These are said to contaminate the crystal lattice structure and can cause a crystal to fail.
That's why they switched to welding the the cans to avoid this.
So if ordering new crystals for the Drake equipment it would be best to ask for the welded type product.

73,

Henry - PA0HJA

On 5/29/2013 5:27 AM, Steve Wedge wrote:
> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
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> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
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> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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14016. Re: [DrakeRadio] Re: R-4B PBT issue resolved - Garey scores again!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 13:55:01 UTC
From: Garey Barrell
Topic: 13941 Message: 14016

Mark -

No, the circuit is considerably different in that area.

What symptoms are you referring to??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Mark wrote:
> Is there a similar capacitor in the R-4C?
>
> I'm experiencing similar symptoms
>
> 73 Mark, PA5MW
>
>

14017. Special Thanks to the Group

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 13:59:08 UTC
From: Michael
Topic: 14017 Message: 14017

I just wanted to drop a note and say thanks to all who post to this group as they work through their Drake repair projects. I have just enough technical ability to really foul up a rig, but enjoy reading about everyone's progress in making their repairs and have learned quite a bit just lurking. 73, Michael nz4d

14018. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 14:02:26 UTC
From: Garey Barrell
Topic: 14007 Message: 14018

Wes -

I'm not saying this wasyour problem, but MANY 'bad crystals' in 2-B receivers are the result of the poor quality of 6U8 tubes. A 6EA8
subbed in will often 'fix' many of those bad crystals.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Wes Bolin wrote:
> When I bought my 2B, it was used but working. I found three bad crystals that needed to be replaced. I concur with your conclusion.
> Wes
>
>
>

14019. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 14:42:42 UTC
From: Wes Bolin
Topic: 14007 Message: 14019

Hi Garey
I did take your advice and installed a 6EA8. The bad crystals did not oscillate, but now the new ones do not have the 6U8 to contend
with. The 6EA8 works fine with the new crystals. Thanks for your advice.
Wes

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 29, 2013 9:02 AM
Subject: Re: [DrakeRadio] Crystal reliability.

Wes -

I'm not saying this wasyour problem, but MANY 'bad crystals' in 2-B receivers are the result of the poor quality of 6U8 tubes. A 6EA8
subbed in will often 'fix' many of those bad crystals.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Wes Bolin wrote:
> When I bought my 2B, it was used but working. I found three bad crystals that needed to be replaced. I concur with your conclusion.
> Wes
>
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Yahoo! Groups Links

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14020. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 14:50:57 UTC
From: Steve Wedge
Topic: 14007 Message: 14020

Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!

I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 29, 2013 9:40 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

Steve -

That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.

As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
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> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>
> Steve Wedge, W1ES/4

> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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14021. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 15:07:16 UTC
From: Garey Barrell
Topic: 14007 Message: 14021

Steve -

Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges, wouldn't be too difficult. I guess I'd start by
dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no luck, a shot in the ultrasonic cleaner. Then ... ?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!
>
> I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else
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> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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>
> All my computers have my signature with various pearls of wisdom appended thereto.
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>
> From: Garey Barrell
> Sent: Wednesday, May 29, 2013 9:40 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Crystal reliability.
>
>
>
> Steve -
>
> That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
> shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.

>
> As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
> Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>>
>> Steve Wedge, W1ES/4
>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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14022. Re: Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 15:09:01 UTC
From: n2mu_1
Topic: 14007 Message: 14022

Hi Steve,

Knock wood - I have 2 1960s era R4Bs, a T4Xb, and T4X and all the xtals and some extra band xtals are still oscillating OK.

However,for another application some time ago, I recall carefully un-soldering a bad xtal can cover, and found that one of the tiny finger grab spring clips holding the xtal wafer slipped off and had an intermittent connection where it "bites" onto the xtal wafer. I carefully repositioned the finger grab on the xtal wafer scratching in a new connection on the tiny land, re-soldered its cover, first around the base - let it cool, and then solder sealed the tiny hole on the top side of the can to avoid vacuum problems and it worked.

I must admit that I tried it on another occasion and it didn't work. But, if it doesn't oscillate to begin with, you haven't lost anything if you don't succeed in attempting to find the problem and repairing it.

73 Hank N2MU ...-.- ..

--- In DrakeRadio@yahoogroups.com, Steve Wedge <w1es1982@...> wrote:
>
> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>
> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>

14023. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 15:19:13 UTC
From: Bob Macklin
Topic: 14007 Message: 14023

There is a way to test crystals with a GDO. This will tell you if the crystal is broken or if you have a circuit problem.

A few years go I purchased a set of 4 Line Twins. All the original crystals have been working fine. I have purchased additional crystals from Bry Carling and they all work fine.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"
----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 29, 2013 7:50 AM
Subject: Re: [DrakeRadio] Crystal reliability.

Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!

I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, May 29, 2013 9:40 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

Steve -

That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.

As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
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> Steve Wedge, W1ES/4
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14024. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 15:47:21 UTC
From: Wes Bolin
Topic: 14007 Message: 14024

Steve
I used a heat gun purchased from harbor Freight for about $8.00 to get cans off my bad crystals. Easy to do. Also used it to open the
bathtub capacitors in my SP600 receiver. Worked like a charm. (I did not try to repair bad crystals- they were cracked).
Wes

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 29, 2013 9:50 AM
Subject: Re: [DrakeRadio] Crystal reliability.

Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!

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Steve Wedge, W1ES/4

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From: Garey Barrell
Sent: Wednesday, May 29, 2013 9:40 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

Steve -

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Steve Wedge wrote:
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14025. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 15:58:58 UTC
From: Henry Vredegoor
Topic: 14007 Message: 14025

I dut cut a defective 15 meter crystal open with a small hacksaw around
the edge, soldering did not work for me.
Nothing obvious to see, not broken, no suspect coloration or whatever,
everything looked just fine
Cleaning didn't help.
Gave up, the crystal of course had lost by then it's (nitrogen?)
protective gas filling already.
I was just curious, like you ;-)

Henry - PA0HJA

On 5/29/2013 5:07 PM, Garey Barrell wrote:
> Steve -
>
> Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges, wouldn't be too difficult. I guess I'd start by
> dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no luck, a shot in the ultrasonic cleaner. Then ... ?
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
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>> I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else
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>> Steve Wedge, W1ES/4
>>
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>>
>> From: Garey Barrell
>> Sent: Wednesday, May 29, 2013 9:40 AM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Crystal reliability.
>>
>>
>>
>> Steve -
>>
>> That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
>> shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.
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>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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14026. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 16:35:24 UTC
From: David Winfree
Topic: 14007 Message: 14026

In the old days, I used a Hewlett Packard 4815A to look at basic crystal parameters, the key one being series R equiv. The 4815 is long obsolete, so you can find these for sub $100. Sometime in the late '70s, production crystals started using resistance welded cases, moving away from soldered cases. THose will present a issue for dissasssembly. I don't know exactly what backfill gas was used, but I'm thinking He to aid in leak detection, or at least dry nitrogen. I'd be reluctant to use basement air inside the crystal for best aging life. It doesn't take even a visual corrosion product to move a xtal resonant freq.

On Wed, May 29, 2013 at 11:07 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Steve -
>
> Might be interesting..... A small torch or big iron, maybe a Hakko 808
> around the edges, wouldn't be too difficult. I guess I'd start by
> dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no
> luck, a shot in the ultrasonic cleaner. Then ... ?
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
> > Yeah, that's what I'm figuring. My first set of Twins I bought in NC,
> back in '07, had two bad crystals. At least a couple more R-4B's have had
> dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had
> a bad 15m, another Twin with a bad 15m and others pulled from accessory
> sockets have also been duds. I find I'm changing crystals almost as much as
> I'm changing tubes!
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> > I suspect there's no real way of repairing these without specialized
> equipment, is there? I'd have to get the case off first - Bernz-O-Matic?
> Might be instructional if nothing else
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> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.

> >
> >
> > All my computers have my signature with various pearls of wisdom
> appended thereto.
> >
> >
> >
> > From: Garey Barrell
> > Sent: Wednesday, May 29, 2013 9:40 AM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] Crystal reliability.
> >
> >
> >
> > Steve -
> >
> > That has not been my experience. Yes, they age (up in frequency,
> sometimes several kHz) but I don't see that many actually fail. A
> > shortage of gain in the oscillator can cause that, but I'm sure you've
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> > As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more
> rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
> > Especially dying after shipping. Complete failure would almost certainly
> be a mechanical problem, fractured crystal, broken weld, etc.
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> >> Steve Wedge, W1ES/4
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14027. T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 17:08:28 UTC
From: WA8RVD
Topic: 14027 Message: 14027

I have an early T-4X
Loads up with full power in 7.0 position but only when RF Tune is in
80 meter area -- loads up in 14.0 position with RF Tune in 40 meter area. I haven't checked the other bands. I am just getting started on this thing; it came with no tubes but PA; I have cleaned all the switches and replaced the tubes and electrolytic and paper caps and rebuilt the ac-4. Seems like this should be obvious but my old head is befuddled! This is my first Drake xmtr.
Hope someone can help head me in the right direction.
73
Mike/WA8RVD

14028. Re: [DrakeRadio] T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 17:18:13 UTC
From: David Winfree
Topic: 14027 Message: 14028

I've been down this road before on a T4X. In my case, I was actually transmitting out of band, due to a missing oscillator. Check the Tx output freq.

On Wed, May 29, 2013 at 1:08 PM, WA8RVD <mlslyker1@...> wrote:

> **
>
>
> I have an early T-4X
> Loads up with full power in 7.0 position but only when RF Tune is in
> 80 meter area -- loads up in 14.0 position with RF Tune in 40 meter area.
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[Non-text portions of this message have been removed]

14029. Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 21:21:36 UTC
From: Howard Traxler
Topic: 14029 Message: 14029

Garey,
No real progress with the TR-4, but I thought I'd let you know:
A friend came over with his tube tester and tested the tubes in my TR-4. There were five tubes that woren't on the chart in his tester
6ej7
6ea8
13de7
6gx6
and 6ev7
So those didn't get tested. The rest of the tubes were in the questionable range.

The most questionable one was the ob2. Under test, it displayed a purple glow and some visible and audable arching and measured 15 of 100 percent . So now I think I'm looking for someone with a newer (or older) tube tester.

It would sure be nice to have this thing off my bench. If I could get anything for it, I'd just sell it as is and let someone else worry about making it work. it's getting a bit frustrating.

73.
Howard, WA9RYF

[Non-text portions of this message have been removed]

14030. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 21:57:53 UTC
From: WA8RVD
Topic: 14027 Message: 14030

Update:
The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
> 73
> Mike/WA8RVD
>

14031. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:28:43 UTC
From: Steve Wedge
Topic: 14007 Message: 14031

I don't think nitrogen would have offered anything - after all, our atmosphere is about 80% N.

I'll open these in case there's something, as they say in Boston, "wicked obvious" upon removing the can. I'm gonna chuck 'em anyway, so I have nothing to lose...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Henry Vredegoor
Sent: Wednesday, May 29, 2013 11:58 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

I dut cut a defective 15 meter crystal open with a small hacksaw around
the edge, soldering did not work for me.
Nothing obvious to see, not broken, no suspect coloration or whatever,
everything looked just fine
Cleaning didn't help.
Gave up, the crystal of course had lost by then it's (nitrogen?)
protective gas filling already.
I was just curious, like you ;-)

Henry - PA0HJA

On 5/29/2013 5:07 PM, Garey Barrell wrote:
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>
> Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges, wouldn't be too difficult. I guess I'd start by
> dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no luck, a shot in the ultrasonic cleaner. Then ... ?
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others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!
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>> I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else
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>> From: Garey Barrell
>> Sent: Wednesday, May 29, 2013 9:40 AM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Crystal reliability.
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>> Steve -
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>> That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
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>> Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.
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>>> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
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>>> Steve Wedge, W1ES/4

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14032. Re: Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:29:31 UTC
From: slowcountry1
Topic: 14029 Message: 14032

Howard,

I'm having e-mail server issues again, therefore this may post several times; my apologies.

If you decide you want to sell the TR-4, I would be interested in acquiring an additional unit.

You may contact me off the list at dcoffman@... if you would like to discuss the unit. I can also provide my cell phone number.

Regards,

Doug - N9XTF

--- In DrakeRadio@yahoogroups.com, "Howard Traxler" <howard@...> wrote:
>
> Garey,
> No real progress with the TR-4, but I thought I'd let you know:
> A friend came over with his tube tester and tested the tubes in my TR-4. There were five tubes that woren't on the chart in his tester
> 6ej7
> 6ea8
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> So those didn't get tested. The rest of the tubes were in the questionable range.
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> The most questionable one was the ob2. Under test, it displayed a purple glow and some visible and audable arching and measured 15 of 100 percent . So now I think I'm looking for someone with a newer (or older) tube tester.
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> It would sure be nice to have this thing off my bench. If I could get anything for it, I'd just sell it as is and let someone else worry about making it work. it's getting a bit frustrating.
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> 73.
> Howard, WA9RYF
>
> [Non-text portions of this message have been removed]
>

14033. Re: [DrakeRadio] T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:30:03 UTC
From: Steve Wedge
Topic: 14027 Message: 14033

Sounds like a bad crystal or something bad in the 40m circuit.

Do the other bands work normally?

Steve Wedge, W1ES/4

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From: WA8RVD
Sent: Wednesday, May 29, 2013 1:08 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] T-4X RF Tune power output problem

I have an early T-4X
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Hope someone can help head me in the right direction.
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Mike/WA8RVD

[Non-text portions of this message have been removed]

14034. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:33:22 UTC
From: WA8RVD
Topic: 14027 Message: 14034

Tnx for your response

Only 80 meters works like it should.

73
Mike/WA8RVD

14035. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:58:57 UTC
From: Bob Macklin
Topic: 14007 Message: 14035

When I was involved with space electronics in the 60's and 70's we used to pump out all the normal air the fill the units with dry nitrogen.

FT-243 crystals have nothing but normal air in them.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"

----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 29, 2013 4:28 PM
Subject: Re: [DrakeRadio] Crystal reliability.

I don't think nitrogen would have offered anything - after all, our atmosphere is about 80% N.

I'll open these in case there's something, as they say in Boston, "wicked obvious" upon removing the can. I'm gonna chuck 'em anyway, so I have nothing to lose...

Steve Wedge, W1ES/4

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From: Henry Vredegoor
Sent: Wednesday, May 29, 2013 11:58 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

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the edge, soldering did not work for me.
Nothing obvious to see, not broken, no suspect coloration or whatever,
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Cleaning didn't help.
Gave up, the crystal of course had lost by then it's (nitrogen?)
protective gas filling already.
I was just curious, like you ;-)

Henry - PA0HJA

On 5/29/2013 5:07 PM, Garey Barrell wrote:
> Steve -
>
> Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges,

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14036. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 00:19:49 UTC
From: Henry Vredegoor
Topic: 14007 Message: 14036

Not sure if the original HC6-U crystal cans were gas filled or just
vacuumed, but the later resistance welded HC25-U crystal cans were
definitely filled with nitrogen gas because of it's inertness.

My 15 meter cut-open crystal looked like the one in this photo:

http://farm6.staticflickr.com/5459/8884766338_0242fd4c03.jpg

Henry - PA0HJA

On 5/30/2013 1:28 AM, Steve Wedge wrote:
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> From: Henry Vredegoor
> Sent: Wednesday, May 29, 2013 11:58 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Crystal reliability.
>
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> Nothing obvious to see, not broken, no suspect coloration or whatever,
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14037. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 00:23:39 UTC
From: Steve Wedge
Topic: 14007 Message: 14037

That might be salvageable!

Steve Wedge, W1ES/4

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Cc: Steve Wedge
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>>
>> Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges, wouldn't be too difficult. I guess I'd start by
>> dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no luck, a shot in the ultrasonic cleaner. Then ... ?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!
>>>
>>> I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else
>>>
>>> Steve Wedge, W1ES/4
>>>
>>> Time flies like an arrow; fruit flies like a banana.
>>>
>>>
>>> All my computers have my signature with various pearls of wisdom appended thereto.
>>>
>>>
>>>
>>> From: Garey Barrell
>>> Sent: Wednesday, May 29, 2013 9:40 AM
>>> To: DrakeRadio@yahoogroups.com

>>> Subject: Re: [DrakeRadio] Crystal reliability.
>>>
>>>
>>>
>>> Steve -
>>>
>>> That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
>>> shortage of gain in the oscillator can cause that, but I'm sure you've tried them in more than one radio.
>>>
>>> As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
>>> Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> Steve Wedge wrote:
>>>> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>>>>
>>>> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>>>>
>>>> Steve Wedge, W1ES/4
>>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>>>>
>>>> ------------------------------------
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>>>> Yahoo! Groups Links
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>>> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14038. Re: [DrakeRadio] Re: Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 00:32:08 UTC
From: M K
Topic: 14029 Message: 14038

The 0b2 is supposed to glow, it should not arc.
I suspect that he had the tester set up wrong-the gas regulator settings
are usually done in a rather strange way.
If he did not follow the SPECIAL instructions, then the result is probably
wrong.
Those tubes are usually long-lived.
However, a replacement for it will probably be fairly cheap.
the other tubes that he could not test-if there is a socket to fit it,
there probably is a way to test them.
Generally supplements were issued to add newer tubes.

On Wed, May 29, 2013 at 7:29 PM, slowcountry1 <dcoffman@...>wrote:

> **
>
>
> Howard,
>
> I'm having e-mail server issues again, therefore this may post several
> times; my apologies.
>
> If you decide you want to sell the TR-4, I would be interested in
> acquiring an additional unit.
>
> You may contact me off the list at dcoffman@... if you would
> like to discuss the unit. I can also provide my cell phone number.
>
> Regards,
>
> Doug - N9XTF
>
>
> --- In DrakeRadio@yahoogroups.com, "Howard Traxler" <howard@...> wrote:
> >
> > Garey,
> > No real progress with the TR-4, but I thought I'd let you know:
> > A friend came over with his tube tester and tested the tubes in my TR-4.
> There were five tubes that woren't on the chart in his tester
> > 6ej7
> > 6ea8
> > 13de7
> > 6gx6
> > and 6ev7
> > So those didn't get tested. The rest of the tubes were in the
> questionable range.

> >
> > The most questionable one was the ob2. Under test, it displayed a purple
> glow and some visible and audable arching and measured 15 of 100 percent .
> So now I think I'm looking for someone with a newer (or older) tube tester.
> >
> > It would sure be nice to have this thing off my bench. If I could get
> anything for it, I'd just sell it as is and let someone else worry about
> making it work. it's getting a bit frustrating.
> >
> > 73.
> > Howard, WA9RYF
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>

[Non-text portions of this message have been removed]

14039. Re: [DrakeRadio] Restoring vacuum tube equipment after long storage.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 00:33:21 UTC
From: Robert F Johnson
Topic: 13981 Message: 14039

Hi All:
I wish to thank Steve, Garey, Paul, Chris and Jim for there informative replies to my question. Much food for thought. I will be rereading this information. My Drake equipment has been out of service since 2004. I have lots of older gear to practice on first. I think this is going to be a long process.

73, Bob W2DSB

[Non-text portions of this message have been removed]

14040. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 00:40:21 UTC
From: Richard Knoppow
Topic: 14007 Message: 14040

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 29, 2013 4:28 PM
Subject: Re: [DrakeRadio] Crystal reliability.

>I don't think nitrogen would have offered anything - after
>all, our atmosphere is about 80% N.
>
I think its to prevent oxidation. Dry nitrogen is
relatively non-reactive. It can be made very free of
moisture and of oxygen so there is little in the crystal
container to react with either the quartz or whatever is
used for the electrodes (commonly silver).
I don't know what makes older crystals fail but I've
encountered some dead ones. It can be whiskers forming on
the plating or broken contacts. Crystals can also break.
The very old fashioned crystals which came in loose
mountings could often be cleaned and many still work after
seventy or eighty years. The problem is that they are not as
stable as the newer variety.
I have not had a failure of a crystal in a Drake rig but
have had to replace crystals in a Collins R-388 due to
excessive drift and the standard crystal in my ancient
Measurements Corp 111-B died. I replaced that one with a
miniature crystal off ebay. I bought a package of five for a
dollar or something like that and chose the closest one.
The original was made by McCoy, who also made very good
crystal lattice filters. I tried to open it but I think the
case was welded.
I test crystals for activity with a Millen GDO.
--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14041. Re: [DrakeRadio] Special Thanks to the Group

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 01:12:26 UTC
From: Mikey
Topic: 14017 Message: 14041

I would echo the thanks .I first pc. Of Drake gear i owned was in the 80s. Have had a love affair with it ever since-especially the 4-line receivers.

14042. Re: [DrakeRadio] Special Thanks to the Group

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 01:15:42 UTC
From: Mikey
Topic: 14017 Message: 14042

I would echo the thanks .I first pc. Of Drake gear i owned was in the 80s. Have had a love affair with it ever since-especially the 4-line receivers.

14043. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 02:18:08 UTC
From: Garey Barrell
Topic: 14027 Message: 14043

Mike -

Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.

Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.

When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.

On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.

You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WA8RVD wrote:
> Update:
> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
>> 73
>> Mike/WA8RVD
>>
>
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> Yahoo! Groups Links
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14044. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 03:08:34 UTC
From: Richard Knoppow
Topic: 14029 Message: 14044

I sent a reply to this several hours ago which has never
showed up so this is a test.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14045. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 03:09:44 UTC
From: Richard Knoppow
Topic: 14029 Message: 14045

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 29, 2013 8:08 PM
Subject: Re: [DrakeRadio] Another chapter in the *life* of
my TR-4

> I sent a reply to this several hours ago which has
> never
> showed up so this is a test.

Obviously working. Well, the other message is lost
somewhere in outer space. Someone else posted the same
thing so no loss.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14046. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 12:11:27 UTC
From: WA8RVD
Topic: 14027 Message: 14046

Thanks Garey and everyone else who responded,
I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
Thanks and 73,
Mike/WA8RVD

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
>
> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
>
> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
>
> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
>
> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> WA8RVD wrote:
> > Update:
> > The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with

RF Tune in 80 meter area. R-4A works using PTO in T-4X.
> >> 73
> >> Mike/WA8RVD
> >>
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> > Yahoo! Groups Links
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14047. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 14:27:51 UTC
From: Garey Barrell
Topic: 14027 Message: 14047

Mike -

Well, you've managed to confuse me completely now.....

IF the R-4A works (all bands) when connected to the T-4X (Assume you mean in TRANSCEIVE, XMTR control.?)

and IF the T-4X works with the R-4A in TRANSCEIVE in RCVR control, something is fishy.....

The T-4X PreMixer subtracts the PTO frequency (5.455 @ '000') from the BAND frequency of 18.1 MHz (40M) to result in 12.645 MHz PreMixer
output. This is mixed with the CAR OSC at 5.645 MHzin the 1st Mixer, outputting 7.000 MHz.

The R-4A PreMixer is exactly the same as above, except the 12.645 MHz is applied to the 1st Mixer, where for a 7.000 MHz input the IF output
results at 5.645 MHz..

Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
what is passed back and forth along the INJ cable between the twounits.

Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
T-4X.

Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.

Obviously if either the PTO or BAND oscillators are not present, there is NO 12.645 MHz PreMixer signal. When connected together, only ONE
PreMixer signal is required. IF the R-4A works on all bands, the T-4X PTO, BAND and PreMixer stages are not requiredfor all band operation.
Vice versa, if the T-4X works on all bands, the R-4A PTO, BAND and PreMixer stages are not required.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WA8RVD wrote:
>
> Thanks Garey and everyone else who responded,
> I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters

to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
> I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
> Thanks and 73,
> Mike/WA8RVD
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Mike -
>>
>> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
>> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
>>
>> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
>> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
>>
>> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
>>
>> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
>>
>> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
>> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
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>> WA8RVD wrote:
>>> Update:
>>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
>>>> 73
>>>> Mike/WA8RVD
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14048. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 17:23:20 UTC
From: WA8RVD
Topic: 14027 Message: 14048

Hi Garey,
The T-4X works the same whether under rcvr or xmtr control. It still only transmits on 80 meters with rcvr control (shows power out at 5645 kc on 40m and 20m with RFtune in 80m area). The R-4A works fine with xmtr control. The Xtal switching part of the bandswitch shows continuity in all positions. Could someone have fiddled with C-97 so that the oscillator only works on 14.1 mc? (80 meters). I have tried a known good 25.1 (20 m) xtal and still no joy on 20 meters.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> Well, you've managed to confuse me completely now.....
>
> IF the R-4A works (all bands) when connected to the T-4X (Assume you mean in TRANSCEIVE, XMTR control.?)
>
> and IF the T-4X works with the R-4A in TRANSCEIVE in RCVR control, something is fishy.....
>
> The T-4X PreMixer subtracts the PTO frequency (5.455 @ '000') from the BAND frequency of 18.1 MHz (40M) to result in 12.645 MHz PreMixer
> output. This is mixed with the CAR OSC at 5.645 MHzin the 1st Mixer, outputting 7.000 MHz.
>
> The R-4A PreMixer is exactly the same as above, except the 12.645 MHz is applied to the 1st Mixer, where for a 7.000 MHz input the IF output
> results at 5.645 MHz..
>
> Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
> what is passed back and forth along the INJ cable between the twounits.
>
> Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
> T-4X.
>
> Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
> R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.
>
> Obviously if either the PTO or BAND oscillators are not present, there is NO 12.645 MHz PreMixer signal. When connected together, only ONE
> PreMixer signal is required. IF the R-4A works on all bands, the T-4X PTO, BAND and PreMixer stages are not requiredfor all band operation.

> Vice versa, if the T-4X works on all bands, the R-4A PTO, BAND and PreMixer stages are not required.
>
> 73, Garey - K4OAH
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> <www.k4oah.com>
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> WA8RVD wrote:
> >
> > Thanks Garey and everyone else who responded,
> > I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
> > I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
> > Thanks and 73,
> > Mike/WA8RVD
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> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Mike -
> >>
> >> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
> >> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
> >>
> >> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
> >> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
> >>
> >> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
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> >> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
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> >> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
> >> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> WA8RVD wrote:
> >>> Update:
> >>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
> >>>> 73
> >>>> Mike/WA8RVD
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14049. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 18:11:53 UTC
From: Steve Wedge
Topic: 14027 Message: 14049

There would have to have been a lot of fiddlin'. This sounds like bad contact to the common wiper of one of the switch wafers.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On May 30, 2013, at 1:23 PM, "WA8RVD" <mlslyker1@...> wrote:

> Hi Garey,
> The T-4X works the same whether under rcvr or xmtr control. It still only transmits on 80 meters with rcvr control (shows power out at 5645 kc on 40m and 20m with RFtune in 80m area). The R-4A works fine with xmtr control. The Xtal switching part of the bandswitch shows continuity in all positions. Could someone have fiddled with C-97 so that the oscillator only works on 14.1 mc? (80 meters). I have tried a known good 25.1 (20 m) xtal and still no joy on 20 meters.
>
> --- In DrakeRadio@...m, Garey Barrell <k4oah@...> wrote:
> >
> > Mike -
> >
> > Well, you've managed to confuse me completely now.....
> >
> > IF the R-4A works (all bands) when connected to the T-4X (Assume you mean in TRANSCEIVE, XMTR control.?)
> >
> > and IF the T-4X works with the R-4A in TRANSCEIVE in RCVR control, something is fishy.....
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> > output. This is mixed with the CAR OSC at 5.645 MHzin the 1st Mixer, outputting 7.000 MHz.
> >
> > The R-4A PreMixer is exactly the same as above, except the 12.645 MHz is applied to the 1st Mixer, where for a 7.000 MHz input the IF output
> > results at 5.645 MHz..
> >
> > Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
> > what is passed back and forth along the INJ cable between the twounits.
> >
> > Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
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> >

> > Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
> > R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.
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> > 73, Garey - K4OAH
> > Glen Allen, VA
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> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > WA8RVD wrote:
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> > > I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
> > > Thanks and 73,
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[Non-text portions of this message have been removed]

14050. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 18:24:22 UTC
From: Garey Barrell
Topic: 14027 Message: 14050

Mike -

OK. Well, we're looking in the wrong place then. The fact that the R-4A works on all bands with XMTR control tells us that all of the
PreMix signals, BAND and PTO are present and working in the T-4X. This of course assumes that the output power you are seeing on 80M _IS_
80M and not 5.645 MHz. I also assume you do not have a scope available.

One possibility is that someone has pulled the Band switch shaft and replaced it with one or more wafers out of sync.

Are the slugs in the RF TUNE rack coming to the right dimensions for each band.?

Most likely the discrepancy is right at the 1st Mixer. Do T3 and T6 peak as they should per the alignment procedure, with the RF TUNE in
the 40M position? I usually work on the 40M band with a non-responsive transmitter. It's well away from the CAR OSC, fairly broad in
tuning, and no worries about neutralization or oscillations.

Since you don't have a scope, (?) Iwould start by looking at each bandswitch wafer, and using the capacitor IDs on the CD determine if when
the BAND switch isin the 40M position, the correct coil & trimmer are selected. It only takes ONE wafer out of position to kill the
transmitter.

Anyway, the problem is narrowed down to something between and including the 1st Mixer (V3) and the Driver (V4), and possibly the PA (V5 & 6).

If all the above checks out, I would next try the alignment steps associated with 40M, e.g., see if the appropriate trimmer caps peak as
they should with the RF TUNE control in the correct spot on the dial. Keep one eye on the output or PLATE meter(s) as tuning a trimmer cap
can make the plate current go from 0 to full scale in an instant, and the PLATE control must be dipped immediately toprotect the PAs.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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WA8RVD wrote:
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>> Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
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14051. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 18:34:39 UTC
From: Garey Barrell
Topic: 14027 Message: 14051

Mike -

I forgot to mention, you can also use a separate receiver to listen for the signal at 7.000 MHz and peak the appropriate caps to see if you
can make it stronger! Again, keeping an eye on the PLATE meter. You should be able to hear the 18.1 MHzand the 12.645 MHz signals ona
general coverage receiver.

C97 was only used inthe first version of the T-4X. C96 was replaced with a 35 pF. I would tweak it to make sure the oscillator started
reliably on the upper BAND crystals. Again, the BAND oscillator IS working if the R-4A works under XMTR control....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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14052. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 18:37:05 UTC
From: Garey Barrell
Topic: 14027 Message: 14052

Steve -

The problem doesn't seem to be inthe BAND oscillator. The R-4A works on all bands under XMTR control in transceive. Ergo the BAND
oscillator in the T-4X IS working on all bands.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Steve Wedge wrote:
> There would have to have been a lot of fiddlin'. This sounds like bad contact to the common wiper of one of the switch wafers.
>
> Steve Wedge, W1ES/4
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> Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)
>
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>
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14053. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 18:57:04 UTC
From: WA8RVD
Topic: 14027 Message: 14053

Garey
I have an SDR receiver so I can find my signal. The bandswitch wafers line up OK. I have a scope but unfortunately I lent it to someone. If my wife lets me; I'll play with it tonight! Thanks again for your help.
Mike

14054. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 19:29:14 UTC
From: Richard Knoppow
Topic: 14027 Message: 14054

----- Original Message -----
From: "WA8RVD" <mlslyker1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 30, 2013 11:57 AM
Subject: [DrakeRadio] Re: T-4X RF Tune power output problem

> Garey
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> bandswitch wafers line up OK. I have a scope but
> unfortunately I lent it to someone. If my wife lets me;
> I'll play with it tonight! Thanks again for your help.
> Mike
>
A quick thought although a bit far fetched, look for
loose or bad solder joints on the switch or around it. I
have found unsoldered wires in both Drake and General Radio
equipment. Poke at the wires with an insulated stick. A
wooden chop stick works. Watch out for some adjustment tools
that look like they are insulated but have some conductivity
probably to eliminate static charges. They conduct enough to
bite you if you get onto high voltage.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14055. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 20:01:41 UTC
From: Steve Wedge
Topic: 14027 Message: 14055

No, I was thinking more in the driver.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, May 30, 2013 2:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Steve -

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73, Garey - K4OAH
Glen Allen, VA

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14056. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 20:16:45 UTC
From: Garey Barrell
Topic: 14027 Message: 14056

Yeah, V3, 4 are most likely.

Be interesting to see if he can hear 7.000 MHz and if the adjustments around V3 peak. Both stages seem to work on 80M, so it almost has to
be V3, 4 and their AC (resonantor switching) behavior.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> No, I was thinking more in the driver.
>
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Thursday, May 30, 2013 2:37 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: T-4X RF Tune power output problem
>
>
>
> Steve -
>
> The problem doesn't seem to be inthe BAND oscillator. The R-4A works on all bands under XMTR control in transceive. Ergo the BAND
> oscillator in the T-4X IS working on all bands.
>
> 73, Garey - K4OAH
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>
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> Steve Wedge wrote:
>> There would have to have been a lot of fiddlin'. This sounds like bad contact to the common wiper of one of the switch wafers.
>>
>> Steve Wedge, W1ES/4
>>
>> Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)
>>
>> On May 30, 2013, at 1:23 PM, "WA8RVD" <mlslyker1@...> wrote:
>>
>>> Hi Garey,
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14057. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 21:16:42 UTC
From: WA8RVD
Topic: 14027 Message: 14057

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14058. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 21:34:20 UTC
From: Garey Barrell
Topic: 14027 Message: 14058

Transmitter is disconnected from R-4A, transmitter keyed in CW or TUNE, GAIN turned up to about 10 o'clock, RF TUNE peaked around 40M mark,
PLATE and LOAD at 0. Are you saying that someone has already 'tightened all the loose (adjustment?!) screws? :-) They should all be about
2-3 turns loose. May be difficult to find if they're all too far off. The INJ trimmersshould peak the PreMixer below, the RF
trimmersshould peak the 7.000 MHz.

You should be able to set the PTO to '000' and hear 5.455 MHzaround the opening in the bottom of the PTO.

You should be able to hear 18.1 MHz with the BAND switch on 40M around the BAND oscillator. -Make sure theXTALS switch is at NORM!

You should be able to hear 12.645 MHz around the PreMixer (V8) Plate.

You should hear 12.645 and 5.645 MHz around V3 Grid, and 7.000MHz around the Plate of V3.

73, Garey - K4OAH
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14059. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 22:08:27 UTC
From: WA8RVD
Topic: 14027 Message: 14059

I have everything except the 7.0 mc. The 7.0 trimmers were already full clockwise!

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
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14060. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 22:21:17 UTC
From: Steve Wedge
Topic: 14027 Message: 14060

You may need to back out the preselector a bit and try retuning. Don't forget that 40 is tuned at 7200, IIRC.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 30, 2013, at 6:08 PM, "WA8RVD" <mlslyker1@...> wrote:

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[Non-text portions of this message have been removed]

14061. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 22:58:39 UTC
From: Garey Barrell
Topic: 14027 Message: 14061

You gotta back them off 3-4 turns. Middle of the range! Tight is NOT maximum signal, they have to be tuned to resonance!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>>>>>> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
>>>>>>>> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
>>>>>>>>
>>>>>>>> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the

BAND signal, and the PreMixer signal.
>>>>>>>>
>>>>>>>> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
>>>>>>>>
>>>>>>>> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
>>>>>>>> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
>>>>>>>>
>>>>>>>> 73, Garey - K4OAH
>>>>>>>> Glen Allen, VA
>>>>>>>>
>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>> <www.k4oah.com>
>>>>>>>>
>>>>>>>> WA8RVD wrote:
>>>>>>>>> Update:
>>>>>>>>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
>>>>>>>>>> 73
>>>>>>>>>> Mike/WA8RVD
>>>>>>>>>>
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14062. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 23:00:30 UTC
From: Garey Barrell
Topic: 14027 Message: 14062

WE want to stay at 7000 so we're looking in the correct place. Yes, thealignment is at 7200, but that's when everything is working.

MIKE - does adjusting the RF trimmers affect the 7.000 MHz signal at all??

If not, you may have an open coil.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> You may need to back out the preselector a bit and try retuning. Don't forget that 40 is tuned at 7200, IIRC.
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On May 30, 2013, at 6:08 PM, "WA8RVD" <mlslyker1@...> wrote:
>
>> I have everything except the 7.0 mc. The 7.0 trimmers were already full clockwise!
>>
>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>>> Transmitter is disconnected from R-4A, transmitter keyed in CW or TUNE, GAIN turned up to about 10 o'clock, RF TUNE peaked around 40M mark,
>>> PLATE and LOAD at 0. Are you saying that someone has already 'tightened all the loose (adjustment?!) screws? :-) They should all be about
>>> 2-3 turns loose. May be difficult to find if they're all too far off. The INJ trimmersshould peak the PreMixer below, the RF
>>> trimmersshould peak the 7.000 MHz.
>>>
>>> You should be able to set the PTO to '000' and hear 5.455 MHzaround the opening in the bottom of the PTO.
>>>
>>> You should be able to hear 18.1 MHz with the BAND switch on 40M around the BAND oscillator. -Make sure theXTALS switch is at NORM!
>>>
>>> You should be able to hear 12.645 MHz around the PreMixer (V8) Plate.
>>>
>>> You should hear 12.645 and 5.645 MHz around V3 Grid, and 7.000MHz around the Plate of V3.
>>>
>>> 73, Garey - K4OAH

>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> WA8RVD wrote:
>>>> Well, I tried transmitting on 40 meters while watching for a signal on my SDR-IQ. Adjusted all 4 7.0 trimmers and no sign of a signal. All 4 trimmers were all the way to the right to start with. V3 V8 & V4 all check out Ok on an EICO 666.
>>>>
>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>> Mike -
>>>>>
>>>>> I forgot to mention, you can also use a separate receiver to listen for the signal at 7.000 MHz and peak the appropriate caps to see if you
>>>>> can make it stronger! Again, keeping an eye on the PLATE meter. You should be able to hear the 18.1 MHzand the 12.645 MHz signals ona
>>>>> general coverage receiver.
>>>>>
>>>>> C97 was only used inthe first version of the T-4X. C96 was replaced with a 35 pF. I would tweak it to make sure the oscillator started
>>>>> reliably on the upper BAND crystals. Again, the BAND oscillator IS working if the R-4A works under XMTR control....
>>>>>
>>>>> 73, Garey - K4OAH
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>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> WA8RVD wrote:
>>>>>> Hi Garey,
>>>>>> The T-4X works the same whether under rcvr or xmtr control. It still only transmits on 80 meters with rcvr control (shows power out at 5645 kc on 40m and 20m with RFtune in 80m area). The R-4A works fine with xmtr control. The Xtal switching part of the bandswitch shows continuity in all positions. Could someone have fiddled with C-97 so that the oscillator only works on 14.1 mc? (80 meters). I have tried a known good 25.1 (20 m) xtal and still no joy on 20 meters.
>>>>>>
>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>> Mike -
>>>>>>>
>>>>>>> Well, you've managed to confuse me completely now.....
>>>>>>>
>>>>>>> IF the R-4A works (all bands) when connected to the T-4X (Assume you mean in TRANSCEIVE, XMTR control.?)
>>>>>>>
>>>>>>> and IF the T-4X works with the R-4A in TRANSCEIVE in RCVR control, something is

fishy.....
>>>>>>>
>>>>>>> The T-4X PreMixer subtracts the PTO frequency (5.455 @ '000') from the BAND frequency of 18.1 MHz (40M) to result in 12.645 MHz PreMixer
>>>>>>> output. This is mixed with the CAR OSC at 5.645 MHzin the 1st Mixer, outputting 7.000 MHz.
>>>>>>>
>>>>>>> The R-4A PreMixer is exactly the same as above, except the 12.645 MHz is applied to the 1st Mixer, where for a 7.000 MHz input the IF output
>>>>>>> results at 5.645 MHz..
>>>>>>>
>>>>>>> Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
>>>>>>> what is passed back and forth along the INJ cable between the twounits.
>>>>>>>
>>>>>>> Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
>>>>>>> T-4X.
>>>>>>>
>>>>>>> Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
>>>>>>> R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.
>>>>>>>
>>>>>>> Obviously if either the PTO or BAND oscillators are not present, there is NO 12.645 MHz PreMixer signal. When connected together, only ONE
>>>>>>> PreMixer signal is required. IF the R-4A works on all bands, the T-4X PTO, BAND and PreMixer stages are not requiredfor all band operation.
>>>>>>> Vice versa, if the T-4X works on all bands, the R-4A PTO, BAND and PreMixer stages are not required.
>>>>>>>
>>>>>>> 73, Garey - K4OAH
>>>>>>> Glen Allen, VA
>>>>>>>
>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>> <www.k4oah.com>
>>>>>>>
>>>>>>> WA8RVD wrote:
>>>>>>>> Thanks Garey and everyone else who responded,
>>>>>>>> I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
>>>>>>>> I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
>>>>>>>> Thanks and 73,
>>>>>>>> Mike/WA8RVD
>>>>>>>>
>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>> Mike -

>>>>>>>>>
>>>>>>>>> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
>>>>>>>>> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
>>>>>>>>>
>>>>>>>>> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
>>>>>>>>> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
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>>>>>>>>> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
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>>>>>>>>> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
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>>>>>>>>> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
>>>>>>>>> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
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>>>>>>>>> 73, Garey - K4OAH
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>>>>>>>>> and TR-4/C Service Supplement CDs
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>>>>>>>>>
>>>>>>>>> WA8RVD wrote:
>>>>>>>>>> Update:
>>>>>>>>>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
>>>>>>>>>>> 73
>>>>>>>>>>> Mike/WA8RVD
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14063. PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-30 23:37:31 UTC
From: Richard Knoppow
Topic: 14063 Message: 14063

I saw this again in the notes in Garey's B line disc so
decided to try it. Its very simple to do. I used a length
of solder wick. Not sure what benifit its supposed to have
but did it anyway. After adjusting the end bearing the
other day, which made the tuning feel very solid and
precise, I decided to follow up and make sure the mechanism
was clean and properly lubricated. I had observed in the
past a slight tendency for the PTO to hunt. The change in
frequency was slow and slight but I think was there. Not in
a fixed direction but back and forth. Not sure if anything
I did helped but it does seem more stable now.
I compared it to the PTO in the T-4XB when using that
for receiver control, it seemed to be more stable. I think
my T-4 is newer than the R-4B. We are talking about maybe
ten or fifteen hz of drift, hard even to detect but I have
a sensitive ear for it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14064. Re: [DrakeRadio] PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 01:05:45 UTC
From: Barry
Topic: 14063 Message: 14064

Not sure if this is apples-to-apples, but the PTO in an R390A has a ground strap that, if not making a good connection to the PTO's shaft, will cause the PTO frequency to "warble". It's a common problem with a simple fix that sounds similar to what you're describing.

Regards,
Barry - N4BUQ

----- Original Message -----
> From: "Richard Knoppow" <1oldlens1@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Thursday, May 30, 2013 6:37:31 PM
> Subject: [DrakeRadio] PTO ground strap mod
>
> I saw this again in the notes in Garey's B line disc so
> decided to try it. Its very simple to do. I used a length
> of solder wick. Not sure what benifit its supposed to have
> but did it anyway. After adjusting the end bearing the
> other day, which made the tuning feel very solid and
> precise, I decided to follow up and make sure the mechanism
> was clean and properly lubricated. I had observed in the
> past a slight tendency for the PTO to hunt. The change in
> frequency was slow and slight but I think was there. Not in
> a fixed direction but back and forth. Not sure if anything
> I did helped but it does seem more stable now.
> I compared it to the PTO in the T-4XB when using that
> for receiver control, it seemed to be more stable. I think
> my T-4 is newer than the R-4B. We are talking about maybe
> ten or fifteen hz of drift, hard even to detect but I have
> a sensitive ear for it.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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> Yahoo! Groups Links
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14065. T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 01:06:55 UTC
From: Steve Wedge
Topic: 14065 Message: 14065

I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.

No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.

Bad cap? Need to find some parts...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14066. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 01:15:00 UTC
From: Robert Logan
Topic: 14007 Message: 14066

And with FT-243s, you could unscrew the case and fine-sand it to raise the freq or run a #2 pencil over it to lower the freq or vary the pressure on the stalk for a little VXO action. Who says we had primitive technology back then... Bob, NZ5A

Sent from my iPhone

On May 29, 2013, at 6:58 PM, "Bob Macklin" <macklinbob@...> wrote:

When I was involved with space electronics in the 60's and 70's we used to pump out all the normal air the fill the units with dry nitrogen.

FT-243 crystals have nothing but normal air in them.

Bob Macklin
K5MYJ
Seattle, Wa.
"Real Radios Glow In The Dark"

----- Original Message -----
From: Steve Wedge
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, May 29, 2013 4:28 PM
Subject: Re: [DrakeRadio] Crystal reliability.

I don't think nitrogen would have offered anything - after all, our atmosphere is about 80% N.

I'll open these in case there's something, as they say in Boston, "wicked obvious" upon removing the can. I'm gonna chuck 'em anyway, so I have nothing to lose...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Henry Vredegoor
Sent: Wednesday, May 29, 2013 11:58 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Crystal reliability.

I dut cut a defective 15 meter crystal open with a small hacksaw around
the edge, soldering did not work for me.
Nothing obvious to see, not broken, no suspect coloration or whatever,
everything looked just fine
Cleaning didn't help.
Gave up, the crystal of course had lost by then it's (nitrogen?)
protective gas filling already.

I was just curious, like you ;-)

Henry - PA0HJA

On 5/29/2013 5:07 PM, Garey Barrell wrote:
> Steve -
>
> Might be interesting..... A small torch or big iron, maybe a Hakko 808 around the edges, wouldn't be too difficult. I guess I'd start by
> dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no luck, a shot in the ultrasonic cleaner. Then ... ?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> Yeah, that's what I'm figuring. My first set of Twins I bought in NC, back in '07, had two bad crystals. At least a couple more R-4B's have had dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had a bad 15m, another Twin with a bad 15m and others pulled from accessory sockets have also been duds. I find I'm changing crystals almost as much as I'm changing tubes!
>>
>> I suspect there's no real way of repairing these without specialized equipment, is there? I'd have to get the case off first - Bernz-O-Matic? Might be instructional if nothing else
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>>
>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
>>
>>
>> From: Garey Barrell
>> Sent: Wednesday, May 29, 2013 9:40 AM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] Crystal reliability.
>>
>>
>>
>> Steve -
>>
>> That has not been my experience. Yes, they age (up in frequency, sometimes several kHz) but I don't see that many actually fail. A
>> shortage of gain in the oscillator can cause that, but I'm sure you've tried them in

more than one radio.
>>
>> As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
>> Especially dying after shipping. Complete failure would almost certainly be a mechanical problem, fractured crystal, broken weld, etc.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>>>
>>> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
>>>
>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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14067. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 01:20:41 UTC
From: WA8RVD
Topic: 14027 Message: 14067

I'll try backing the trimmers off tomorrow . This is a nice looking radio but came to me advertised as "Not Working" , all the tubes were missing but the 6JB6's. It came with an AC-4 but the power cable had been gnawed almost in two by a large animal and then soldered and taped back together. Someone has obviously been at it with their magic screwdriver, too.
Since it works on 80 meters would that mean that the coils are OK?
When trying to transmit on 40 meters adjusting the trimmers has no effect when RF tune is in the 40 meter area but if you adjust RF tune to the 80 meter area then you get full power out at 5645 kc. Dip the plate, etc.
I'm lost!

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> WE want to stay at 7000 so we're looking in the correct place. Yes, thealignment is at 7200, but that's when everything is working.
>
> MIKE - does adjusting the RF trimmers affect the 7.000 MHz signal at all??
>
> If not, you may have an open coil.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
> > You may need to back out the preselector a bit and try retuning. Don't forget that 40 is tuned at 7200, IIRC.
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> >
> > On May 30, 2013, at 6:08 PM, "WA8RVD" <mlslyker1@...> wrote:
> >
> >> I have everything except the 7.0 mc. The 7.0 trimmers were already full clockwise!
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> >> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>> Transmitter is disconnected from R-4A, transmitter keyed in CW or TUNE, GAIN turned up to about 10 o'clock, RF TUNE peaked around 40M mark,
> >>> PLATE and LOAD at 0. Are you saying that someone has already 'tightened all the loose (adjustment?!) screws? :-) They should all be about
> >>> 2-3 turns loose. May be difficult to find if they're all too far off. The INJ trimmersshould peak the PreMixer below, the RF

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> >>> You should be able to set the PTO to '000' and hear 5.455 MHzaround the opening in the bottom of the PTO.
> >>>
> >>> You should be able to hear 18.1 MHz with the BAND switch on 40M around the BAND oscillator. -Make sure theXTALS switch is at NORM!
> >>>
> >>> You should be able to hear 12.645 MHz around the PreMixer (V8) Plate.
> >>>
> >>> You should hear 12.645 and 5.645 MHz around V3 Grid, and 7.000MHz around the Plate of V3.
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> >>> Glen Allen, VA
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> >>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>> and TR-4/C Service Supplement CDs
> >>> <www.k4oah.com>
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> >>> WA8RVD wrote:
> >>>> Well, I tried transmitting on 40 meters while watching for a signal on my SDR-IQ. Adjusted all 4 7.0 trimmers and no sign of a signal. All 4 trimmers were all the way to the right to start with. V3 V8 & V4 all check out Ok on an EICO 666.
> >>>>
> >>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>> Mike -
> >>>>>
> >>>>> I forgot to mention, you can also use a separate receiver to listen for the signal at 7.000 MHz and peak the appropriate caps to see if you
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> >>>>> general coverage receiver.
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> >>>>> C97 was only used inthe first version of the T-4X. C96 was replaced with a 35 pF. I would tweak it to make sure the oscillator started
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> >>>>> WA8RVD wrote:
> >>>>>> Hi Garey,
> >>>>>> The T-4X works the same whether under rcvr or xmtr control. It still only transmits on 80 meters with rcvr control (shows power out at 5645 kc on 40m and 20m with

RFtune in 80m area). The R-4A works fine with xmtr control. The Xtal switching part of the bandswitch shows continuity in all positions. Could someone have fiddled with C-97 so that the oscillator only works on 14.1 mc? (80 meters). I have tried a known good 25.1 (20 m) xtal and still no joy on 20 meters.
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> >>>>>>> The T-4X PreMixer subtracts the PTO frequency (5.455 @ '000') from the BAND frequency of 18.1 MHz (40M) to result in 12.645 MHz PreMixer
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> >>>>>>> results at 5.645 MHz..
> >>>>>>>
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> >>>>>>> what is passed back and forth along the INJ cable between the twounits.
> >>>>>>>
> >>>>>>> Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
> >>>>>>> T-4X.
> >>>>>>>
> >>>>>>> Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
> >>>>>>> R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.
> >>>>>>>
> >>>>>>> Obviously if either the PTO or BAND oscillators are not present, there is NO 12.645 MHz PreMixer signal. When connected together, only ONE
> >>>>>>> PreMixer signal is required. IF the R-4A works on all bands, the T-4X PTO, BAND and PreMixer stages are not requiredfor all band operation.
> >>>>>>> Vice versa, if the T-4X works on all bands, the R-4A PTO, BAND and PreMixer stages are not required.
> >>>>>>>
> >>>>>>> 73, Garey - K4OAH
> >>>>>>> Glen Allen, VA
> >>>>>>>
> >>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>> <www.k4oah.com>

> >>>>>>>
> >>>>>>> WA8RVD wrote:
> >>>>>>>> Thanks Garey and everyone else who responded,
> >>>>>>>> I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
> >>>>>>>> I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
> >>>>>>>> Thanks and 73,
> >>>>>>>> Mike/WA8RVD
> >>>>>>>>
> >>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>>>>> Mike -
> >>>>>>>>>
> >>>>>>>>> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
> >>>>>>>>> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
> >>>>>>>>>
> >>>>>>>>> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
> >>>>>>>>> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
> >>>>>>>>>
> >>>>>>>>> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
> >>>>>>>>>
> >>>>>>>>> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
> >>>>>>>>>
> >>>>>>>>> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
> >>>>>>>>> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
> >>>>>>>>>
> >>>>>>>>> 73, Garey - K4OAH
> >>>>>>>>> Glen Allen, VA
> >>>>>>>>>
> >>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>>>>> and TR-4/C Service Supplement CDs
> >>>>>>>>> <www.k4oah.com>
> >>>>>>>>>
> >>>>>>>>> WA8RVD wrote:
> >>>>>>>>>> Update:
> >>>>>>>>>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
> >>>>>>>>>> 73
> >>>>>>>>>> Mike/WA8RVD
> >>>>>>>>>>

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14068. Re: [DrakeRadio] PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 01:57:54 UTC
From: Garey Barrell
Topic: 14063 Message: 14068

Richard -

There is quite a difference in frequency of the PTO depending upon how well and where the lead screw/tuning slug is grounded. Originally
the lead screw was grounded primarily via the 10 ball bearings in the front of the gearbox, and additionally via the fork resting on the
rider bar, held in relatively stable condition by the spring.

As the grease aged and picked up dirt, it became 'lumpy' and resulted in minute hops in frequency as you tuned, which 'usually' stopped when
you stopped turning the knob. People also insisted on oiling the rider bar, which, combined with the oiling of the lead screw/fork
interface, gave a less than consistent ground. Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions
and promulgated a field change adding a small piece of braid, soldered to the fork and to the side wall of the gearbox. They even provided
the braid along with the instruction sheet.! This made for a solid, consistent ground, and was factory installed through the restof the
C-Line and into the 7 Line.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> I saw this again in the notes in Garey's B line disc so
> decided to try it. Its very simple to do. I used a length
> of solder wick. Not sure what benifit its supposed to have
> but did it anyway. After adjusting the end bearing the
> other day, which made the tuning feel very solid and
> precise, I decided to follow up and make sure the mechanism
> was clean and properly lubricated. I had observed in the
> past a slight tendency for the PTO to hunt. The change in
> frequency was slow and slight but I think was there. Not in
> a fixed direction but back and forth. Not sure if anything
> I did helped but it does seem more stable now.
> I compared it to the PTO in the T-4XB when using that
> for receiver control, it seemed to be more stable. I think
> my T-4 is newer than the R-4B. We are talking about maybe
> ten or fifteen hz of drift, hard even to detect but I have
> a sensitive ear for it.
>
>

14069. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 02:00:53 UTC
From: Garey Barrell
Topic: 14065 Message: 14069

Steve -

You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.
>
> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
>
> Bad cap? Need to find some parts...
>
>

14070. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 02:24:56 UTC
From: Garey Barrell
Topic: 14027 Message: 14070

Perfectly logical..... Sure the tubes (V3 and V4) in the right sockets! :-)

The coils are probably ok, there is enough 80M drive that it's conceivable the grid or plate circuit of the PreMixercould be 'untuned'. Have
you checked the DCvoltages on V3 per the conditions in the Voltage chart in the manual?

Turn the RF TUNE fully clockwise against the stop. The pointer will probably be a little bit past the 10 on the scale. The top edge of the
four tuning slugs should be exactly 9/16" above the top edge of the fiberglass coilform. Turn the knob fully counter-clockwise and the
pointer should be near 0. Split the difference with the gap at 10 so that the pointer is 'centered'. You can move the pointer by holding the
knob and pushing with a fingernail. Don't push too close to the panel or it will rub.

Nothing to be 'lost' about. First, the fact that it tunes to 5.645 MHz indicates that everything is working, it's just not getting the 'in
band' signal. I believe the problem is in V3 or its associated switch wafer and/or T6. Good tube?? Correct tube?? Socket wired
correctly?? You should have a good strong signal at 5.645 MHz -AND- a good strong signal at 12.645 MHz on the Grid of V3. T6 should tune to
7.000 MHz with C148 with the RF TUNE near the bottom of the 40M segment on its dial. Remember the PTOis set to '000', and you might have to
tune around a little bit (few kHz) to find the 7.000 MHz signal. If you can find any signal at all at 7.000, adjust C148 and see if it will
peak. If it does not peak, there is a switchwafer, T6, C148, C28, C31 etc. problem. Most likely a broken connection, bad switch contact or
short rather than a defective component. Visual inspection is very important here, comparing against the schematic. There are three T-4X
schematics on the CD, I don't think there are any differences in this area, but ...

WE have noidea what some genius may have screwed up while he was 'fixing' the T-4X up to sell it!!

73, Garey - K4OAH
Glen Allen, VA
Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WA8RVD wrote:
> I'll try backing the trimmers off tomorrow . This is a nice looking radio but came to me advertised as "Not Working" , all the tubes were missing but the 6JB6's. It came with an AC-4 but the power cable had been gnawed almost in two by a large animal and then soldered and taped back together. Someone has obviously been at it with their magic screwdriver, too.
> Since it works on 80 meters would that mean that the coils are OK?

> When trying to transmit on 40 meters adjusting the trimmers has no effect when RF tune is in the 40 meter area but if you adjust RF tune to the 80 meter area then you get full power out at 5645 kc. Dip the plate, etc.
> I'm lost!
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> WE want to stay at 7000 so we're looking in the correct place. Yes, thealignment is at 7200, but that's when everything is working.
>>
>> MIKE - does adjusting the RF trimmers affect the 7.000 MHz signal at all??
>>
>> If not, you may have an open coil.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Steve Wedge wrote:
>>> You may need to back out the preselector a bit and try retuning. Don't forget that 40 is tuned at 7200, IIRC.
>>>
>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>>>
>>> On May 30, 2013, at 6:08 PM, "WA8RVD" <mlslyker1@...> wrote:
>>>
>>>> I have everything except the 7.0 mc. The 7.0 trimmers were already full clockwise!
>>>>
>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>> Transmitter is disconnected from R-4A, transmitter keyed in CW or TUNE, GAIN turned up to about 10 o'clock, RF TUNE peaked around 40M mark,
>>>>> PLATE and LOAD at 0. Are you saying that someone has already 'tightened all the loose (adjustment?!) screws? :-) They should all be about
>>>>> 2-3 turns loose. May be difficult to find if they're all too far off. The INJ trimmersshould peak the PreMixer below, the RF
>>>>> trimmersshould peak the 7.000 MHz.
>>>>>
>>>>> You should be able to set the PTO to '000' and hear 5.455 MHzaround the opening in the bottom of the PTO.
>>>>>
>>>>> You should be able to hear 18.1 MHz with the BAND switch on 40M around the BAND oscillator. -Make sure theXTALS switch is at NORM!
>>>>>
>>>>> You should be able to hear 12.645 MHz around the PreMixer (V8) Plate.
>>>>>
>>>>> You should hear 12.645 and 5.645 MHz around V3 Grid, and 7.000MHz around the Plate of V3.

>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>
>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> WA8RVD wrote:
>>>>>> Well, I tried transmitting on 40 meters while watching for a signal on my SDR-IQ. Adjusted all 4 7.0 trimmers and no sign of a signal. All 4 trimmers were all the way to the right to start with. V3 V8 & V4 all check out Ok on an EICO 666.
>>>>>>
>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>> Mike -
>>>>>>>
>>>>>>> I forgot to mention, you can also use a separate receiver to listen for the signal at 7.000 MHz and peak the appropriate caps to see if you
>>>>>>> can make it stronger! Again, keeping an eye on the PLATE meter. You should be able to hear the 18.1 MHzand the 12.645 MHz signals ona
>>>>>>> general coverage receiver.
>>>>>>>
>>>>>>> C97 was only used inthe first version of the T-4X. C96 was replaced with a 35 pF. I would tweak it to make sure the oscillator started
>>>>>>> reliably on the upper BAND crystals. Again, the BAND oscillator IS working if the R-4A works under XMTR control....
>>>>>>>
>>>>>>> 73, Garey - K4OAH
>>>>>>> Glen Allen, VA
>>>>>>>
>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>> <www.k4oah.com>
>>>>>>>
>>>>>>> WA8RVD wrote:
>>>>>>>> Hi Garey,
>>>>>>>> The T-4X works the same whether under rcvr or xmtr control. It still only transmits on 80 meters with rcvr control (shows power out at 5645 kc on 40m and 20m with RFtune in 80m area). The R-4A works fine with xmtr control. The Xtal switching part of the bandswitch shows continuity in all positions. Could someone have fiddled with C-97 so that the oscillator only works on 14.1 mc? (80 meters). I have tried a known good 25.1 (20 m) xtal and still no joy on 20 meters.
>>>>>>>>
>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>> Mike -
>>>>>>>>>
>>>>>>>>> Well, you've managed to confuse me completely now.....
>>>>>>>>>
>>>>>>>>> IF the R-4A works (all bands) when connected to the T-4X (Assume you mean in TRANSCEIVE, XMTR control.?)

>>>>>>>>>
>>>>>>>>> and IF the T-4X works with the R-4A in TRANSCEIVE in RCVR control, something is fishy.....
>>>>>>>>>
>>>>>>>>> The T-4X PreMixer subtracts the PTO frequency (5.455 @ '000') from the BAND frequency of 18.1 MHz (40M) to result in 12.645 MHz PreMixer
>>>>>>>>> output. This is mixed with the CAR OSC at 5.645 MHzin the 1st Mixer, outputting 7.000 MHz.
>>>>>>>>>
>>>>>>>>> The R-4A PreMixer is exactly the same as above, except the 12.645 MHz is applied to the 1st Mixer, where for a 7.000 MHz input the IF output
>>>>>>>>> results at 5.645 MHz..
>>>>>>>>>
>>>>>>>>> Obviously BOTH the PTO and the BAND oscillator have to be present to generate that 12.645 MHz PreMixer signal in either unit. This signal is
>>>>>>>>> what is passed back and forth along the INJ cable between the twounits.
>>>>>>>>>
>>>>>>>>> Under RCVRcontrol, the T-4X PreMixer is disabled by switch contactsand the PreMixer signal from the R-4Ais applied to the 1st Mixer in the
>>>>>>>>> T-4X.
>>>>>>>>>
>>>>>>>>> Under XMTR control, the PreMixer signal, along with a control bias, (~-30V) is sent to the R-4A along the INJ cable. The -30V disables the
>>>>>>>>> R-4A PreMixer and the T-4X PreMixer signal is applied tothe 1st Mixer in the R-4A.
>>>>>>>>>
>>>>>>>>> Obviously if either the PTO or BAND oscillators are not present, there is NO 12.645 MHz PreMixer signal. When connected together, only ONE
>>>>>>>>> PreMixer signal is required. IF the R-4A works on all bands, the T-4X PTO, BAND and PreMixer stages are not requiredfor all band operation.
>>>>>>>>> Vice versa, if the T-4X works on all bands, the R-4A PTO, BAND and PreMixer stages are not required.
>>>>>>>>>
>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>> Glen Allen, VA
>>>>>>>>>
>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>> <www.k4oah.com>
>>>>>>>>>
>>>>>>>>> WA8RVD wrote:
>>>>>>>>>> Thanks Garey and everyone else who responded,
>>>>>>>>>> I have cleaned the bandswitch (but not with deoxit) and that may be what got 80 meters to work. Ordered some Deoxit yesterday (and some transistors and a tube just in case). I also have some other xtals I can try. The R-4A works when connected to the T-4x and the T-4X works with the R-4A (but only on 80 meters).
>>>>>>>>>> I need to make more room on my bench! Also working on an RME 69 and a Ranger 1 - the Drake is "new" technology to me. I would be lost without your CD's Garey - I highly reccommend them!
>>>>>>>>>> Thanks and 73,

>>>>>>>>>> Mike/WA8RVD
>>>>>>>>>>
>>>>>>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>>>>>> Mike -
>>>>>>>>>>
>>>>>>>>>> Your problem is in the BAND oscillator. Since ONLY 80M works, most likely culprit is a dirty crystal switch section of the BAND switch.
>>>>>>>>>> This is the one over by the crystal bank, driven by the right angle drive of the main BAND switch.
>>>>>>>>>>
>>>>>>>>>> Some DeoxIT on those switch contacts, and a little switch exercise, should clear it up. Make sure the shaft coupler is tight and that the
>>>>>>>>>> crystal switch is actually turning. Close inspection of the area would be a good idea, just to see that everything is as itshould be.
>>>>>>>>>>
>>>>>>>>>> When transceiving with the R-4A, the R-4A provides not only the PTO, but also the BAND signal, and the PreMixer signal.
>>>>>>>>>>
>>>>>>>>>> On 40M, with the 18.1 MHz crystal NOT operating,it is possible to tune the RF TUNE to the 5.645 MHz CAR OSC frequency.
>>>>>>>>>>
>>>>>>>>>> You say 'R-4A works using PTO in T-4X', but I think you mean the other way around. IF this statement is accurate, I think you'll find that
>>>>>>>>>> the transmitter is NOT working on 80M, but is also on 5.645 MHz. ??
>>>>>>>>>>
>>>>>>>>>> 73, Garey - K4OAH
>>>>>>>>>> Glen Allen, VA
>>>>>>>>>>
>>>>>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>>>>>> and TR-4/C Service Supplement CDs
>>>>>>>>>> <www.k4oah.com>
>>>>>>>>>>
>>>>>>>>>> WA8RVD wrote:
>>>>>>>>>>> Update:
>>>>>>>>>>> The Thing now works as it should on 80 meters! On 40 meters it outputs at 5645 kc with RF Tune in 80 meter area. R-4A works using PTO in T-4X.
>>>>>>>>>>>> 73
>>>>>>>>>>>> Mike/WA8RVD
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14071. Re: [DrakeRadio] tuner?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 03:18:21 UTC
From: Mikey
Topic: 14071 Message: 14071

im putting a drake station together a little at a time.a homebrew qro tuner will be my winter project.anyone have any input on a good design? Im kinda interested in a z tuner by a guy down in texas. Thanx, mike

14072. Re: [DrakeRadio] PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 03:23:08 UTC
From: Richard Knoppow
Topic: 14063 Message: 14072

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 30, 2013 6:57 PM
Subject: Re: [DrakeRadio] PTO ground strap mod

> Richard -
>
> There is quite a difference in frequency of the PTO
> depending upon how well and where the lead screw/tuning
> slug is grounded. Originally
> the lead screw was grounded primarily via the 10 ball
> bearings in the front of the gearbox, and additionally via
> the fork resting on the
> rider bar, held in relatively stable condition by the
> spring.
>
> As the grease aged and picked up dirt, it became 'lumpy'
> and resulted in minute hops in frequency as you tuned,
> which 'usually' stopped when
> you stopped turning the knob. People also insisted on
> oiling the rider bar, which, combined with the oiling of
> the lead screw/fork
> interface, gave a less than consistent ground. Somewhere
> near the middle of the C-Line I guess Drake got tired of
> answering these questions
> and promulgated a field change adding a small piece of
> braid, soldered to the fork and to the side wall of the
> gearbox. They even provided
> the braid along with the instruction sheet.! This made
> for a solid, consistent ground, and was factory installed
> through the restof the
> C-Line and into the 7 Line.
>
> 73, Garey - K4OAH
> Glen Allen, VA

Thanks Garey, I had cleaned everything and the PTO has
been pretty stable but I thought if Drake recommended the
mod I should make it. Very easy to do. I don't know if it
made any difference but I've had the set tuned to W1AW for
about two hours listening to the code practice and bulletins
and it has not moved. BTW, its a very good CW receiver.
While the IF should be broader than my RCA AR-88 its able to
reject QRM the AR-88 hears quite well.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14073. Re: [DrakeRadio] PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 03:18:19 UTC
From: Richard Knoppow
Topic: 14063 Message: 14073

----- Original Message -----
From: "Barry" <n4buq@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, May 30, 2013 6:05 PM
Subject: Re: [DrakeRadio] PTO ground strap mod

> Not sure if this is apples-to-apples, but the PTO in an
> R390A has a ground strap that, if not making a good
> connection to the PTO's shaft, will cause the PTO
> frequency to "warble". It's a common problem with a
> simple fix that sounds similar to what you're describing.
>
> Regards,
> Barry - N4BUQ

The answer is probably in the list archives, I've seen
it discussed but can't remember the reason for the strap.
In any case I've been listening to W1AW code practice and
bulletins for about two hours while doing other things and
the receiver has not moved.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14074. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 04:13:15 UTC
From: Jim Shorney
Topic: 14007 Message: 14074

There's some anecdotal evidence that 40 Meter crystals in the later twins can are sligthly more prone to failure by going off frequency by 20 or 30 KHz. I have one such. My 2-A had a dead 10 Meter crystal.After the usual troubleshooting, I took the can off and it started to work. Put the can back on, and it was still working the last time I checked.

Shattered crystals are easy to diagnose, they make a nice sandy rattle when shaken.

73

-Jim (...but not stirred)
NU0C

On Tue, 28 May 2013 23:27:14 -0400, Steve Wedge wrote:

>
>I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>
>Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14075. Re: [DrakeRadio] tuner?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 07:32:48 UTC
From: Jim Wiley
Topic: 14071 Message: 14075

Unless you need an automatic tuner, how about building one using the basic MN-2000 / MN-2700 design? An excellent unit, and quite versatile. Basically, a reversed Pi-network design, using a low-pass filter topology instead of the high-pass design common with most other units.

Or you could simply buy one from one of the on-line auction sites. They appear there with some frequency, and will in all probability cost less than buying the individual parts. .

These couplers work well with coax feeders, and I often use one with open-wire or ladder line by running the RF through a 4:1 balun connected to the coupler via a short length of R-8/U cable. Handles a 1500-watt amplifier with no problem whatsoever.

One of my better "all-band" antennas consists of a 90-foot doublet connected via about 75 feet of ladder-line. It will match all bands (80 through 10 meters) with ease, except for 160 meters. If I were to extended the doublet to perhaps 75 or 80 feet feet per side, it would work there too.

The MN-2700 (what I use) works on the newer WARC and 60-meter bands too, even though it is not directly calibrated for those frequencies. I just select an adjacent band, for example 17 meters tunes well using the 15-meter position, then adjust for best match. The units have more than enough tuning range to handle these "in-between" bands.

- Jim, KL7CC

On 5/30/2013 7:18 PM, Mikey wrote:
>
>
> im putting a drake station together a little at a time.a homebrew qro
> tuner will be my winter project.anyone have any input on a good
> design? Im kinda interested in a z tuner by a guy down in texas.
> Thanx, mike
>
>

[Non-text portions of this message have been removed]

14076. Re: [DrakeRadio] tuner?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 11:06:15 UTC
From: Paul Christensen
Topic: 14071 Message: 14076

Tell us more about the type of antenna(s) and transmission line being used. If you are using mostly "full size" wire antennas on the HF bands, there's little need to go beyond an "L" network (or balanced "L") without the need for reversal. If the input to the feedline will not dip below 50 ohms, there's no need to utilize a "T" or any other form of network that requires tuning and matching to a low-Z.

Consider an 136 ft long dipole at 30 ft in height over average soil. Calculated feedpoint Z is 5353 -j1871 ohms. That's an extremely high and reactive Z since it is a full-wave on 40m. Even with a 1/4-wave 600-ohm line section, the Z at the feedline input is ~ 70 ohms -- still well above 50 ohms. A few years ago, I ran a model that calculates the input feedline Z of my 80m dipole when fed by 600-ohm line. Between 80m-10m, it never goes below 50-ohms, regardless of line length. There are many ops using lossy tuners where a simple two component network will get the job done and have the benefit of knowing that only one setting will get the match -- unlike the "T" where a match can be obtained at multiple settings but with varying loss. Sometimes it cannot be avoided in cases of phased arrays. Then, a T network may be required to achieve a match while controlling phase shift through the network. So, I suggest not using a tuner that can cover such Z extremes if you're using simple, non-phased radiators of reasonable length.

Companies like Drake had to create tuners that would tune and match under a wide range of operating conditions in order to provide a "one size fits all" device. We continue to see that with popular tuners today. But adding such extreme flexibility comes at the expense of unnecessary losses. See measured data in QST product reviews as evidence of this. For my own operating, the Drake line of tuners, while well-built, would be among my last choice. Although not as "smart" looking on the desktop, it's pretty tough to beat the KW version of the Johnson Matchbox for a low-loss QRO device. You may hear negative comments about the Matchbox's limited matching range, but those limitations occur with antennas that are generally very short -- and of absolutely no interest to me. Since your interest is in a homebrew design, you may want to construct your own version of the Matchbox, perhaps using parts from a "beater" unit.

Another design worth considering is the balanced tuner described in QST by AG6K back around 1990. A motorized version of this design can be seen on my QRZ.com page. The manually tuned version can be easily constructed over a weekend.

Paul, W9AC

----- Original Message -----
From: Mikey
To: drakeradio@yahoogroups.com
Sent: Thursday, May 30, 2013 11:18 PM
Subject: Re: [DrakeRadio] tuner?

im putting a drake station together a little at a time.a homebrew qro tuner will be my winter project.anyone have any input on a good design? Im kinda interested in a z tuner by a guy down in texas. Thanx, mike

[Non-text portions of this message have been removed]

14077. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 11:37:51 UTC
From: Steve Wedge
Topic: 14065 Message: 14077

Yup - the crystal's in there. Lots of signal through the premixer. I can see it with the scope at the front two trimmers and there's nothing at all for signal beginning with the driver grid. I'm suspecting a bad capacitor and will find out later today - I've got a T-4XB carcass and the parts are identical. Going to start with the grid circuit, since there's no signal there (I checked and can see a signal on the other trimmer when I put the rig on 80, so I know the scope isn't killing it).

I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.

It'll be interesting.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Thursday, May 30, 2013 10:00 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XC - no 160

Steve -

You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.
>
> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
>

> Bad cap? Need to find some parts...
>
>

[Non-text portions of this message have been removed]

14078. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 14:10:14 UTC
From: WA8RVD
Topic: 14027 Message: 14078

Good morning,
I've made some progress! I did the first part of the alignment procedure (VTVM to T-3, sig gen to inj terminal and adjusted injection trimmers)and I now have output on all bands except 40 meters!
I got very, very little voltage at T-3 for 40 meters - just barely enough to be able to see a peak when adjusting the trimmers.
40 meters still gives no (zero) output at 7.0 mc but full output at 5645 kc.

I'm feeling better about this rig! But I NEED 40 meters, too! So what do I do next?
I really appreciate all the help - can't do this by myself, I guess.

73,
Mike/WA8RVD

14079. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 14:31:04 UTC
From: Garey Barrell
Topic: 14007 Message: 14079

Jim -

I've not seen a preponderance of failed 40M (18.1 MHz) crystals in the twins. The first crystal to fail in the 2-B was the 40M crystal
(11.0MHz), a failure that was often mitigated by swapping out the 6U8A with a 6EA8 (higher gain) tube. If you've ever looked at the BAND
oscillator in the 2-B, but it actually operates in two different modes, depending upon frequency. The 11.0 MHz crystal is 'on the edge'
between the two modes and I've often wondered if that had some effect.

As an aside, I'm hearing more lately from people saying that the twins tuning rate is too fast. I believe there are a couple of reasons for
this, not the least of which is the fact that the newer radios CAN BE set for ridiculously slow tuning rates! Ever since single knob (vs
BAND and Bandspread knobs) tuning came along, it's been a trade-off between setting a specific frequency, or more recently tuning in a
digital signal, or more recently still making _SURE_ that you are _EXACTLY_ on 14.260.000 MHz! At least on the dial! :-)

Anyway, the twins are 25 kHzper full rotation. Interestingly, the 2-B is approximately 40 kHz per rotation, almost HALF the speed of the twins.

Personally, I have no trouble tuning in anything with the twins, but then I developed a 'safe-cracker'stouch' on my BC-453 Novice receiver
which covered the entire (50 kHz) 80M Novice band in approximately 1/4 of a turn.!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> There's some anecdotal evidence that 40 Meter crystals in the later twins can
> are sligthly more prone to failure by going off frequency by 20 or 30 KHz. I
> have one such. My 2-A had a dead 10 Meter crystal.After the usual
> troubleshooting, I took the can off and it started to work. Put the can back
> on, and it was still working the last time I checked.
>
> Shattered crystals are easy to diagnose, they make a nice sandy rattle when
> shaken.
>
> 73
>
> -Jim (...but not stirred)
> NU0C

>
> On Tue, 28 May 2013 23:27:14 -0400, Steve Wedge wrote:
>
>> I've noticed that the plugin crystals - both the regular bands and accessories, seem to go bad a lot. I just sold one that was working, sent it in lots of bubble wrap and it was doa. I've got a pile of about half a dozen dead rocks from as many radios.
>>
>> Has anyone else noticed this sort of failure rate? These seem to be bad more than even tubes. Is it an age-related issue? Why don't the carrier oscillator xtals seem to go bad?
> --
> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"
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> Yahoo! Groups Links
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14080. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 14:40:08 UTC
From: Garey Barrell
Topic: 14065 Message: 14080

Steve -

OK, just checking!! :-)

So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yup - the crystal's in there. Lots of signal through the premixer. I can see it with the scope at the front two trimmers and there's nothing at all for signal beginning with the driver grid. I'm suspecting a bad capacitor and will find out later today - I've got a T-4XB carcass and the parts are identical. Going to start with the grid circuit, since there's no signal there (I checked and can see a signal on the other trimmer when I put the rig on 80, so I know the scope isn't killing it).
>
> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
>
> It'll be interesting.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
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>
> From: Garey Barrell
> Sent: Thursday, May 30, 2013 10:00 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] T-4XC - no 160
>
>

>
> Steve -
>
> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.
>>
>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
>>
>> Bad cap? Need to find some parts...
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14081. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 14:54:01 UTC
From: Steve Wedge
Topic: 14065 Message: 14081

Changed out the whole grid trimmer assembly - no change. I can't peak or even get any signal of any kind in the driver grid circuit.

Plenty of signal at the premixer trimmers (the two toward the front), which is consistent with the receiver being able to work off the TX PTO.

Aside from the trimmer/fixed caps - which I've already changed, the only thing to my eye that seems to be unique to 160 are T1 and T9 - which I believe are the two small solenoidal inductors at the very bottom of their bandswitch wafers and look like they're going to be nasty to get at.

Any places I'm missing before I dive in? Not really relishing this.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Steve Wedge
Sent: Thursday, May 30, 2013 9:06 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] T-4XC - no 160

I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.

No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.

Bad cap? Need to find some parts...

Steve Wedge, W1ES/4

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All my computers have my signature with various pearls of wisdom appended thereto.

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[Non-text portions of this message have been removed]

14082. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 14:56:03 UTC
From: Steve Wedge
Topic: 14065 Message: 14082

I was getting a short at the contacts but I am going to try the Cramolin approach first before the major surgery route. I could have been reading the resistance of the coil rather than the switch...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Friday, May 31, 2013 10:40 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] T-4XC - no 160

Steve -

OK, just checking!! :-)

So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yup - the crystal's in there. Lots of signal through the premixer. I can see it with the scope at the front two trimmers and there's nothing at all for signal beginning with the driver grid. I'm suspecting a bad capacitor and will find out later today - I've got a T-4XB carcass and the parts are identical. Going to start with the grid circuit, since there's no signal there (I checked and can see a signal on the other trimmer when I put the rig on 80, so I know the scope isn't killing it).
>
> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
>
> It'll be interesting.
>
> 73,
>
> Steve Wedge, W1ES/4

>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
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>
> From: Garey Barrell
> Sent: Thursday, May 30, 2013 10:00 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] T-4XC - no 160
>
>
>
> Steve -
>
> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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> Steve Wedge wrote:
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>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
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>> Bad cap? Need to find some parts...
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14083. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 15:18:49 UTC
From: Garey Barrell
Topic: 14027 Message: 14083

Mike -

Progress!! Do you have the 18.1 MHz BAND signal at Q3? Do you have the 12.645MHz PreMixer signal at the Plate of V8? Same at the Grid of
V3? Do you have ANY 7.000 MHz signal at the Plateof V3?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WA8RVD wrote:
> Good morning,
> I've made some progress! I did the first part of the alignment procedure (VTVM to T-3, sig gen to inj terminal and adjusted injection trimmers)and I now have output on all bands except 40 meters!
> I got very, very little voltage at T-3 for 40 meters - just barely enough to be able to see a peak when adjusting the trimmers.
> 40 meters still gives no (zero) output at 7.0 mc but full output at 5645 kc.
>
> I'm feeling better about this rig! But I NEED 40 meters, too! So what do I do next?
> I really appreciate all the help - can't do this by myself, I guess.
>
> 73,
> Mike/WA8RVD
>
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> Yahoo! Groups Links
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14084. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 15:43:05 UTC
From: Garey Barrell
Topic: 14065 Message: 14084

T1 and T9??? T1 is the PTO!?! I assume you are referring to L5 and L6?? A little difference here, those coils are SHORTED by the switch
except in the 160M position.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I was getting a short at the contacts but I am going to try the Cramolin approach first before the major surgery route. I could have been reading the resistance of the coil rather than the switch...
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
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>
> From: Garey Barrell
> Sent: Friday, May 31, 2013 10:40 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] T-4XC - no 160
>
>
>
> Steve -
>
> OK, just checking!! :-)
>
> So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
> coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??
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> 73, Garey - K4OAH
> Glen Allen, VA
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> <www.k4oah.com>
>
> Steve Wedge wrote:
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>> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
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>> 73,
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
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>>
>>
>> From: Garey Barrell
>> Sent: Thursday, May 30, 2013 10:00 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] T-4XC - no 160
>>
>>
>>
>> Steve -
>>
>> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
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>> 73, Garey - K4OAH
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>> Steve Wedge wrote:
>>> I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good

contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.
>>>
>>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
>>>
>>> Bad cap? Need to find some parts...
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14085. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 15:46:33 UTC
From: WA8RVD
Topic: 14027 Message: 14085

Hello, Garey
I have 18.1 at Q3 and 12.6 at v3 - no 7.0

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Mike -
>
> Progress!! Do you have the 18.1 MHz BAND signal at Q3? Do you have the 12.645MHz PreMixer signal at the Plate of V8? Same at the Grid of
> V3? Do you have ANY 7.000 MHz signal at the Plateof V3?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> WA8RVD wrote:
> > Good morning,
> > I've made some progress! I did the first part of the alignment procedure (VTVM to T-3, sig gen to inj terminal and adjusted injection trimmers)and I now have output on all bands except 40 meters!
> > I got very, very little voltage at T-3 for 40 meters - just barely enough to be able to see a peak when adjusting the trimmers.
> > 40 meters still gives no (zero) output at 7.0 mc but full output at 5645 kc.
> >
> > I'm feeling better about this rig! But I NEED 40 meters, too! So what do I do next?
> > I really appreciate all the help - can't do this by myself, I guess.
> >
> > 73,
> > Mike/WA8RVD
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14086. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 16:01:53 UTC
From: Steve Wedge
Topic: 14065 Message: 14086

Yeah thought the ref des was funny but that's what's on my schematic. And yes, they're not even transformers!

Cleaned the switches and no change. I would think that I'd get some kick-up in plate current even if the trimmer was mistuned if everything else was working.

One of the coils does look to be "disheveled" but was showing continuity. Aside from the trimmers, those coils are the only thing I see that's unique to 160. Even of the tank circuit was roasted in that position, I would at least see a drive signal at the operating frequency.

I also took your recommendation and moved up to around 1900 kHz but that didn't buy me anything...

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 31, 2013, at 11:43 AM, Garey Barrell <k4oah@...> wrote:

>
> T1 and T9??? T1 is the PTO!?! I assume you are referring to L5 and L6?? A little difference here, those coils are SHORTED by the switch
> _except_ in the 160M position.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> Steve Wedge wrote:
> > I was getting a short at the contacts but I am going to try the Cramolin approach first before the major surgery route. I could have been reading the resistance of the coil rather than the switch...
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
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> >
> > All my computers have my signature with various pearls of wisdom appended thereto.
> >
> >
> >
> > From: Garey Barrell

> > Sent: Friday, May 31, 2013 10:40 AM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] T-4XC - no 160
> >
> >
> >
> > Steve -
> >
> > OK, just checking!! :-)
> >
> > So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
> > coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > Steve Wedge wrote:
> >> Yup - the crystal's in there. Lots of signal through the premixer. I can see it with the scope at the front two trimmers and there's nothing at all for signal beginning with the driver grid. I'm suspecting a bad capacitor and will find out later today - I've got a T-4XB carcass and the parts are identical. Going to start with the grid circuit, since there's no signal there (I checked and can see a signal on the other trimmer when I put the rig on 80, so I know the scope isn't killing it).
> >>
> >> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
> >>
> >> It'll be interesting.
> >>
> >> 73,
> >>
> >> Steve Wedge, W1ES/4
> >>
> >> Time flies like an arrow; fruit flies like a banana.
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> >>
> >> All my computers have my signature with various pearls of wisdom appended thereto.
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> >>
> >> From: Garey Barrell
> >> Sent: Thursday, May 30, 2013 10:00 PM
> >> To: DrakeRadio@yahoogroups.com
> >> Subject: Re: [DrakeRadio] T-4XC - no 160

> >>
> >>
> >>
> >> Steve -
> >>
> >> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
> >> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
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> >> Steve Wedge wrote:
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> >>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
> >>>
> >>> Bad cap? Need to find some parts...
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14087. Re: [DrakeRadio] Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 16:18:12 UTC
From: Garey Barrell
Topic: 14027 Message: 14087

OK. Youdo still have 5.645 MHz at V3 as well.... If adjusting C128 has no effect, it has to be a problem with C128, C28, C31; switch
contacts on S-4(f) and (r), and associated wiring. IF you have a replacement for C28 or something close, you could bridge it across C128 to
see if it would then tune.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WA8RVD wrote:
> Hello, Garey
> I have 18.1 at Q3 and 12.6 at v3 - no 7.0
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Mike -
>>
>> Progress!! Do you have the 18.1 MHz BAND signal at Q3? Do you have the 12.645MHz PreMixer signal at the Plate of V8? Same at the Grid of
>> V3? Do you have ANY 7.000 MHz signal at the Plateof V3?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> WA8RVD wrote:
>>> Good morning,
>>> I've made some progress! I did the first part of the alignment procedure (VTVM to T-3, sig gen to inj terminal and adjusted injection trimmers)and I now have output on all bands except 40 meters!
>>> I got very, very little voltage at T-3 for 40 meters - just barely enough to be able to see a peak when adjusting the trimmers.
>>> 40 meters still gives no (zero) output at 7.0 mc but full output at 5645 kc.
>>>
>>> I'm feeling better about this rig! But I NEED 40 meters, too! So what do I do next?
>>> I really appreciate all the help - can't do this by myself, I guess.
>>>
>>> 73,
>>> Mike/WA8RVD
>>>

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> Yahoo! Groups Links
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14088. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 16:26:50 UTC
From: Garey Barrell
Topic: 14065 Message: 14088

Steve -

WHY are you NOT using one of the schematics on the CD. Perhaps you need to compare to a 'correct' schematic!?!?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yeah thought the ref des was funny but that's what's on my schematic. And yes, they're not even transformers!
>
> Cleaned the switches and no change. I would think that I'd get some kick-up in plate current even if the trimmer was mistuned if everything else was working.
>
> One of the coils does look to be "disheveled" but was showing continuity. Aside from the trimmers, those coils are the only thing I see that's unique to 160. Even of the tank circuit was roasted in that position, I would at least see a drive signal at the operating frequency.
>
> I also took your recommendation and moved up to around 1900 kHz but that didn't buy me anything...
>
> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
> On May 31, 2013, at 11:43 AM, Garey Barrell <k4oah@...> wrote:
>
>> T1 and T9??? T1 is the PTO!?! I assume you are referring to L5 and L6?? A little difference here, those coils are SHORTED by the switch
>> _except_ in the 160M position.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Steve Wedge wrote:
>>> I was getting a short at the contacts but I am going to try the Cramolin approach first before the major surgery route. I could have been reading the resistance of the coil rather

than the switch...
>>>
>>> Steve Wedge, W1ES/4
>>>
>>> Time flies like an arrow; fruit flies like a banana.
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>>>
>>> All my computers have my signature with various pearls of wisdom appended thereto.
>>>
>>>
>>>
>>> From: Garey Barrell
>>> Sent: Friday, May 31, 2013 10:40 AM
>>> To: DrakeRadio@yahoogroups.com
>>> Subject: Re: [DrakeRadio] T-4XC - no 160
>>>
>>>
>>>
>>> Steve -
>>>
>>> OK, just checking!! :-)
>>>
>>> So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
>>> coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??
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>>> Steve Wedge wrote:
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>>>> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
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>>>> It'll be interesting.
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>>>> Steve -
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>>>> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
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>>>>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
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>>>>> Bad cap? Need to find some parts...
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14089. Drake 4 line equipment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 16:52:30 UTC
From: John Lawrence
Topic: 14089 Message: 14089

I just noticed two sets of Drake 4 line equipment for sale on qrz.com this morning.

--
John NE3E

[Non-text portions of this message have been removed]

14090. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 17:39:24 UTC
From: Steve Wedge
Topic: 14065 Message: 14090

Don't have the c cd yet. Will have to rectify that when I get back home.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On May 31, 2013, at 12:26 PM, Garey Barrell <k4oah@...> wrote:

> Steve -
>
> WHY are you NOT using one of the schematics on the CD. Perhaps you need to compare to a 'correct' schematic!?!?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
> > Yeah thought the ref des was funny but that's what's on my schematic. And yes, they're not even transformers!
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> > Cleaned the switches and no change. I would think that I'd get some kick-up in plate current even if the trimmer was mistuned if everything else was working.
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> > One of the coils does look to be "disheveled" but was showing continuity. Aside from the trimmers, those coils are the only thing I see that's unique to 160. Even of the tank circuit was roasted in that position, I would at least see a drive signal at the operating frequency.
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> > I also took your recommendation and moved up to around 1900 kHz but that didn't buy me anything...
> >
> > Steve Wedge, W1ES/4
> > Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> >
> > On May 31, 2013, at 11:43 AM, Garey Barrell <k4oah@mindspring.com> wrote:
> >
> >> T1 and T9??? T1 is the PTO!?! I assume you are referring to L5 and L6?? A little difference here, those coils are SHORTED by the switch
> >> _except_ in the 160M position.
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> >> 73, Garey - K4OAH
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> >>>
> >>>
> >>> From: Garey Barrell
> >>> Sent: Friday, May 31, 2013 10:40 AM
> >>> To: DrakeRadio@yahoogroups.com
> >>> Subject: Re: [DrakeRadio] T-4XC - no 160
> >>>
> >>>
> >>>
> >>> Steve -
> >>>
> >>> OK, just checking!! :-)
> >>>
> >>> So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
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> >>>> I was initially suspicious of that small inductor on the switch wafer, but it is

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> >>>> Sent: Thursday, May 30, 2013 10:00 PM
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> >>>> Steve -
> >>>>
> >>>> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
> >>>> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
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> >>>>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
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[Non-text portions of this message have been removed]

14091. Re: PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 17:48:08 UTC
From: w7jpg
Topic: 14063 Message: 14091

Hey Gary,
You said, "Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions.."

Do you happen to know what the SN cut in was for the R-4C's that enjoyed the PTO strap "upgrade"?

73, Chris - W7JPG

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Richard -
>
> There is quite a difference in frequency of the PTO depending upon how well and where the lead screw/tuning slug is grounded. Originally
> the lead screw was grounded primarily via the 10 ball bearings in the front of the gearbox, and additionally via the fork resting on the
> rider bar, held in relatively stable condition by the spring.
>
> As the grease aged and picked up dirt, it became 'lumpy' and resulted in minute hops in frequency as you tuned, which 'usually' stopped when
> you stopped turning the knob. People also insisted on oiling the rider bar, which, combined with the oiling of the lead screw/fork
> interface, gave a less than consistent ground. Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions
> and promulgated a field change adding a small piece of braid, soldered to the fork and to the side wall of the gearbox. They even provided
> the braid along with the instruction sheet.! This made for a solid, consistent ground, and was factory installed through the restof the
> C-Line and into the 7 Line.
>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Richard Knoppow wrote:
> > I saw this again in the notes in Garey's B line disc so
> > decided to try it. Its very simple to do. I used a length
> > of solder wick. Not sure what benifit its supposed to have
> > but did it anyway. After adjusting the end bearing the
> > other day, which made the tuning feel very solid and
> > precise, I decided to follow up and make sure the mechanism
> > was clean and properly lubricated. I had observed in the

> > past a slight tendency for the PTO to hunt. The change in
> > frequency was slow and slight but I think was there. Not in
> > a fixed direction but back and forth. Not sure if anything
> > I did helped but it does seem more stable now.
> > I compared it to the PTO in the T-4XB when using that
> > for receiver control, it seemed to be more stable. I think
> > my T-4 is newer than the R-4B. We are talking about maybe
> > ten or fifteen hz of drift, hard even to detect but I have
> > a sensitive ear for it.
> >
> >
>

14092. Re: PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 17:50:34 UTC
From: w7jpg
Topic: 14063 Message: 14092

Garey, Good grief, I guess I haven't had enough coffee...sorry I misspelled your name on that last post.
Chris

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Richard -
>
> There is quite a difference in frequency of the PTO depending upon how well and where the lead screw/tuning slug is grounded. Originally
> the lead screw was grounded primarily via the 10 ball bearings in the front of the gearbox, and additionally via the fork resting on the
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> > my T-4 is newer than the R-4B. We are talking about maybe
> > ten or fifteen hz of drift, hard even to detect but I have
> > a sensitive ear for it.
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> >
>

14093. Re: [DrakeRadio] T-4XC - no 160

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 18:36:04 UTC
From: Garey Barrell
Topic: 14065 Message: 14093

OOps, my bad. I've been 'working' on three T-4Xs and just sawwhat I expected. Yes, they are (erroneously) marked T1 and T4 in the "C".
Frankly the quality of Drake documentation fell off considerably during C-Line production. Early schematics were clearly original drawings
while later ones were apparently photocopies that were edited, poorly.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Don't have the c cd yet. Will have to rectify that when I get back home.
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> Steve Wedge, W1ES/4
> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
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> On May 31, 2013, at 12:26 PM, Garey Barrell <k4oah@...> wrote:
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>> Steve -
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>>>>> To: DrakeRadio@yahoogroups.com
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>>>>> Steve -
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>>>>> OK, just checking!! :-)
>>>>>
>>>>> So the signal (1.8 MHz) is present at the Plate of the 1st Mixer (V3) but not at the Grid of the Driver (V4)?? Yeah, those incremental
>>>>> coils were my first thought before I read all the way through. Switch contacts clean for the incremental coil??
>>>>>
>>>>> 73, Garey - K4OAH
>>>>> Glen Allen, VA
>>>>>

>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>> and TR-4/C Service Supplement CDs
>>>>> <www.k4oah.com>
>>>>>
>>>>> Steve Wedge wrote:
>>>>>> Yup - the crystal's in there. Lots of signal through the premixer. I can see it with the scope at the front two trimmers and there's nothing at all for signal beginning with the driver grid. I'm suspecting a bad capacitor and will find out later today - I've got a T-4XB carcass and the parts are identical. Going to start with the grid circuit, since there's no signal there (I checked and can see a signal on the other trimmer when I put the rig on 80, so I know the scope isn't killing it).
>>>>>>
>>>>>> I was initially suspicious of that small inductor on the switch wafer, but it is showing continuity when I disconnected the long lead to the transformer.
>>>>>>
>>>>>> It'll be interesting.
>>>>>>
>>>>>> 73,
>>>>>>
>>>>>> Steve Wedge, W1ES/4
>>>>>>
>>>>>> Time flies like an arrow; fruit flies like a banana.
>>>>>>
>>>>>>
>>>>>> All my computers have my signature with various pearls of wisdom appended thereto.
>>>>>>
>>>>>>
>>>>>>
>>>>>> From: Garey Barrell
>>>>>> Sent: Thursday, May 30, 2013 10:00 PM
>>>>>> To: DrakeRadio@yahoogroups.com
>>>>>> Subject: Re: [DrakeRadio] T-4XC - no 160
>>>>>>
>>>>>>
>>>>>>
>>>>>> Steve -
>>>>>>
>>>>>> You are aware that the 160M crystal was NOT standard. It's a 12.6, and needs to be installed in the ACCY XTALS bank, usually spot #1. It
>>>>>> also doesn't tune much below 1.8 MHz, at best. Later T-4X(any) had additional loading caps added but still not much below 1.8 MHz.
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> Steve Wedge wrote:

>>>>>>> I've got a T-4XC on the bench, nothing beyond idle current on 160m. Receives fine with either TX or RX selected. I don't see any burnt contacts, no shorted capacitors good contact through all switches. The trimmers are not shorted, and adjusting the trimmers for the driver grid and plate do nothing.
>>>>>>>
>>>>>>> No signal at all at the driver grid trimmer and I can see a robust signal on the 80m trimmer when I'm on that band.
>>>>>>>
>>>>>>> Bad cap? Need to find some parts...
>>>>>>>
>>>>>>>
>>>>>>
>>>>>> [Non-text portions of this message have been removed]
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>>>>>> ------------------------------------
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>>>>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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14094. Re: [DrakeRadio] Re: PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 18:44:45 UTC
From: Garey Barrell
Topic: 14063 Message: 14094

Chris -

No, sorry, I never bothered to consider that. I know the early ones didn't have it, and the later ones did, but never tried to narrow it
down further! :-) It would be hard to say anyway, since so many were done in the field. I never bothered to do one except when I was
working on a PTO, and not always then.

My feeling is that the original scheme worked fine for over 20,000 PTOs for many years! The only time I have had a problem was when the
original grease was still in the front bearing and it had gotten 'crunchy'. In those cases I just cleaned out the old grease, relubed with
Lubriplate, and cleaned oil and grease from the fork and rider bar. In almost 50 years, I'm not aware of doing one more than once, i.e.,
I've never had a problem with one that had Lubriplate in it. That said, I certainly wouldn't argue against it.

If I was servicing for others, for money, I'd probably do it as a matter of course, but for myself I just haven't seen theneed.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w7jpg wrote:
> Hey Gary,
> You said, "Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions.."
>
> Do you happen to know what the SN cut in was for the R-4C's that enjoyed the PTO strap "upgrade"?
>
> 73, Chris - W7JPG
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Richard -
>>
>> There is quite a difference in frequency of the PTO depending upon how well and where the lead screw/tuning slug is grounded. Originally
>> the lead screw was grounded primarily via the 10 ball bearings in the front of the gearbox, and additionally via the fork resting on the
>> rider bar, held in relatively stable condition by the spring.
>>

>> As the grease aged and picked up dirt, it became 'lumpy' and resulted in minute hops in frequency as you tuned, which 'usually' stopped when
>> you stopped turning the knob. People also insisted on oiling the rider bar, which, combined with the oiling of the lead screw/fork
>> interface, gave a less than consistent ground. Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions
>> and promulgated a field change adding a small piece of braid, soldered to the fork and to the side wall of the gearbox. They even provided
>> the braid along with the instruction sheet.! This made for a solid, consistent ground, and was factory installed through the restof the
>> C-Line and into the 7 Line.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Richard Knoppow wrote:
>>> I saw this again in the notes in Garey's B line disc so
>>> decided to try it. Its very simple to do. I used a length
>>> of solder wick. Not sure what benifit its supposed to have
>>> but did it anyway. After adjusting the end bearing the
>>> other day, which made the tuning feel very solid and
>>> precise, I decided to follow up and make sure the mechanism
>>> was clean and properly lubricated. I had observed in the
>>> past a slight tendency for the PTO to hunt. The change in
>>> frequency was slow and slight but I think was there. Not in
>>> a fixed direction but back and forth. Not sure if anything
>>> I did helped but it does seem more stable now.
>>> I compared it to the PTO in the T-4XB when using that
>>> for receiver control, it seemed to be more stable. I think
>>> my T-4 is newer than the R-4B. We are talking about maybe
>>> ten or fifteen hz of drift, hard even to detect but I have
>>> a sensitive ear for it.
>>>
>>>
>
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> ------------------------------------
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> Yahoo! Groups Links
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14095. Re: [DrakeRadio] Re: PTO ground strap mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 18:46:00 UTC
From: Garey Barrell
Topic: 14063 Message: 14095

Chris -

I've been fighting it for 70 years! Doesn't bither me a bot! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w7jpg wrote:
> Garey, Good grief, I guess I haven't had enough coffee...sorry I misspelled your name on that last post.
> Chris
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Richard -
>>
>> There is quite a difference in frequency of the PTO depending upon how well and where the lead screw/tuning slug is grounded. Originally
>> the lead screw was grounded primarily via the 10 ball bearings in the front of the gearbox, and additionally via the fork resting on the
>> rider bar, held in relatively stable condition by the spring.
>>
>> As the grease aged and picked up dirt, it became 'lumpy' and resulted in minute hops in frequency as you tuned, which 'usually' stopped when
>> you stopped turning the knob. People also insisted on oiling the rider bar, which, combined with the oiling of the lead screw/fork
>> interface, gave a less than consistent ground. Somewhere near the middle of the C-Line I guess Drake got tired of answering these questions
>> and promulgated a field change adding a small piece of braid, soldered to the fork and to the side wall of the gearbox. They even provided
>> the braid along with the instruction sheet.! This made for a solid, consistent ground, and was factory installed through the restof the
>> C-Line and into the 7 Line.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Richard Knoppow wrote:

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>>> decided to try it. Its very simple to do. I used a length
>>> of solder wick. Not sure what benifit its supposed to have
>>> but did it anyway. After adjusting the end bearing the
>>> other day, which made the tuning feel very solid and
>>> precise, I decided to follow up and make sure the mechanism
>>> was clean and properly lubricated. I had observed in the
>>> past a slight tendency for the PTO to hunt. The change in
>>> frequency was slow and slight but I think was there. Not in
>>> a fixed direction but back and forth. Not sure if anything
>>> I did helped but it does seem more stable now.
>>> I compared it to the PTO in the T-4XB when using that
>>> for receiver control, it seemed to be more stable. I think
>>> my T-4 is newer than the R-4B. We are talking about maybe
>>> ten or fifteen hz of drift, hard even to detect but I have
>>> a sensitive ear for it.
>>>
>>>
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> Yahoo! Groups Links
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14096. Side Tone Mod for T-4XB

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 22:05:40 UTC
From: Richard Knoppow
Topic: 14096 Message: 14096

In Garey's B line disc is a modification of the CW side tone in the T-4XB. What is the purpose of this mod? I have not yet looked to see if my TX has it.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14097. Re: T-4X RF Tune power output problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 22:16:26 UTC
From: WA8RVD
Topic: 14027 Message: 14097

OK, Garey
I'll see what I can find (or order one). Meanwhile; I've rebuilt the AC-3 for my old TR-3 which I've had since 1973 (my first SSB rig). Still works! and finished up my Ranger 1. Now I have some room to work!

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> OK. Youdo still have 5.645 MHz at V3 as well.... If adjusting C128 has no effect, it has to be a problem with C128, C28, C31; switch
> contacts on S-4(f) and (r), and associated wiring. IF you have a replacement for C28 or something close, you could bridge it across C128 to
> see if it would then tune.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> WA8RVD wrote:
> > Hello, Garey
> > I have 18.1 at Q3 and 12.6 at v3 - no 7.0
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Mike -
> >>
> >> Progress!! Do you have the 18.1 MHz BAND signal at Q3? Do you have the 12.645MHz PreMixer signal at the Plate of V8? Same at the Grid of
> >> V3? Do you have ANY 7.000 MHz signal at the Plateof V3?
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> WA8RVD wrote:
> >>> Good morning,
> >>> I've made some progress! I did the first part of the alignment procedure (VTVM to T-3, sig gen to inj terminal and adjusted injection trimmers)and I now have output on all bands except 40 meters!
> >>> I got very, very little voltage at T-3 for 40 meters - just barely enough to be able to see a peak when adjusting the trimmers.

> >>> 40 meters still gives no (zero) output at 7.0 mc but full output at 5645 kc.
> >>>
> >>> I'm feeling better about this rig! But I NEED 40 meters, too! So what do I do next?
> >>> I really appreciate all the help - can't do this by myself, I guess.
> >>>
> >>> 73,
> >>> Mike/WA8RVD
> >>>
> >>>
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> >>> Yahoo! Groups Links
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14098. Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 22:42:50 UTC
From: curtstamp
Topic: 14098 Message: 14098

I have a Drake 2B. The band switch is functional but changes bands not as smooth as I think it should. What can be done to make it turn more easily? Tnx for your input and suggestions.

14099. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-31 22:58:52 UTC
From: William Houghton
Topic: 14098 Message: 14099

I have often found that the grease has dried out or is missing on the detent at the back of the bandswitch on a lot of radios. I clean out the old stuff as best I can and replace it. I usually use the end of a toothpick to place a dab of grease into the cups for the detent ball.

From: curtstamp <Curtstamp@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, May 31, 2013 3:42:58 PM
Subject: [DrakeRadio] Drake 2B Bandswitch

I have a Drake 2B. The band switch is functional but changes bands not as smooth as I think it should. What can be done to make it turn more easily? Tnx for your input and suggestions.

[Non-text portions of this message have been removed]

14100. RE: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 00:25:51 UTC
From: Jerry Kimento
Topic: 14098 Message: 14100

What do you use to replace the old grease

Jerry

Wb9jfr

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: Friday, May 31, 2013 5:59 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake 2B Bandswitch

I have often found that the grease has dried out or is missing on the detent at the back of the bandswitch on a lot of radios. I clean out the old stuff as best I can and replace it. I usually use the end of a toothpick to place a dab of grease into the cups for the detent ball.

From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Fri, May 31, 2013 3:42:58 PM
Subject: [DrakeRadio] Drake 2B Bandswitch

I have a Drake 2B. The band switch is functional but changes bands not as smooth as I think it should. What can be done to make it turn more easily? Tnx for your input and suggestions.

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[Non-text portions of this message have been removed]

14101. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 01:14:46 UTC
From: William Houghton
Topic: 14098 Message: 14101

I use a white lithium grease that I bought at a local hardware store. If the shaft goes through some bushings, you might also try a drop or two of Fader lube between the shaft and the bushing and then turn the switch several times. There is usually a bushing at the front of a bandswitch where it mounts to the front of the chassis. These often can build up some corrosion over time.

From: Jerry Kimento <jerrywk1@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, May 31, 2013 5:26:14 PM
Subject: RE: [DrakeRadio] Drake 2B Bandswitch

What do you use to replace the old grease

Jerry

Wb9jfr

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: Friday, May 31, 2013 5:59 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake 2B Bandswitch

I have often found that the grease has dried out or is missing on the detent at the back of the bandswitch on a lot of radios. I clean out the old stuff as best

I can and replace it. I usually use the end of a toothpick to place a dab of grease into the cups for the detent ball.

From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Fri, May 31, 2013 3:42:58 PM
Subject: [DrakeRadio] Drake 2B Bandswitch

I have a Drake 2B. The band switch is functional but changes bands not as smooth

as I think it should. What can be done to make it turn more easily? Tnx for your

input and suggestions.

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14102. RE: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 01:20:33 UTC
From: Jim Shorney
Topic: 14098 Message: 14102

I have used Triflow PTFE (Teflon) based bicycle grease on detent balls. It works very well.

http://www.triflowlubricants.com/Tri-Flow_Synthetic_Grease.html

A 1/4-Oz. tube has lasted me three or four years, but is almost empty. I just ordered a 3 Oz. tube to keep going.

73

-Jim
NU0C

On Fri, 31 May 2013 19:25:51 -0500, Jerry Kimento wrote:

>What do you use to replace the old grease
>
>
>
>Jerry
>
>Wb9jfr
>
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>
>
>
>From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
>Sent: Friday, May 31, 2013 5:59 PM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
>
>
>
>
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>the back of the bandswitch on a lot of radios. I clean out the old stuff as best
>I can and replace it. I usually use the end of a toothpick to place a dab of
>grease into the cups for the detent ball.
>
>_____
>From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
>To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>Sent: Fri, May 31, 2013 3:42:58 PM

>Subject: [DrakeRadio] Drake 2B Bandswitch
>
>
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>as I think it should. What can be done to make it turn more easily? Tnx for your
>input and suggestions.
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14103. RE: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 01:38:16 UTC
From: Jerry Kimento
Topic: 14098 Message: 14103

Thank you

jerry

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Jim Shorney
Sent: Friday, May 31, 2013 8:21 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Drake 2B Bandswitch

I have used Triflow PTFE (Teflon) based bicycle grease on detent balls. It works very well.

http://www.triflowlubricants.com/Tri-Flow_Synthetic_Grease.html

A 1/4-Oz. tube has lasted me three or four years, but is almost empty. I just
ordered a 3 Oz. tube to keep going.

73

-Jim
NU0C

On Fri, 31 May 2013 19:25:51 -0500, Jerry Kimento wrote:

>What do you use to replace the old grease
>
>
>
>Jerry
>
>Wb9jfr
>
>
>
>
>
>From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>]
On Behalf Of William Houghton
>Sent: Friday, May 31, 2013 5:59 PM
>To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
>
>

>
>
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detent at
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best
>I can and replace it. I usually use the end of a toothpick to place a dab
of
>grease into the cups for the detent ball.
>
>_____
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<mailto:Curtstamp%40aol.com> >
>To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
>Sent: Fri, May 31, 2013 3:42:58 PM
>Subject: [DrakeRadio] Drake 2B Bandswitch
>
>
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A,
GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and
he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

14104. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 01:42:57 UTC
From: Steve Wedge
Topic: 14098 Message: 14104

I've been using a moly-based grease I had left over from doing some CV joints. Great stuff and not too thick...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Jim Shorney
Sent: Friday, May 31, 2013 9:20 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] Drake 2B Bandswitch

I have used Triflow PTFE (Teflon) based bicycle grease on detent balls. It works very well.

http://www.triflowlubricants.com/Tri-Flow_Synthetic_Grease.html

A 1/4-Oz. tube has lasted me three or four years, but is almost empty. I just ordered a 3 Oz. tube to keep going.

73

-Jim
NU0C

On Fri, 31 May 2013 19:25:51 -0500, Jerry Kimento wrote:

>What do you use to replace the old grease
>
>
>
>Jerry
>
>Wb9jfr
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>
>
>From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
>Sent: Friday, May 31, 2013 5:59 PM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
>

>
>
>
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>grease into the cups for the detent ball.
>
>_____
>From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
>To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
>Sent: Fri, May 31, 2013 3:42:58 PM
>Subject: [DrakeRadio] Drake 2B Bandswitch
>
>
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

14105. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 01:45:15 UTC
From: Richard Knoppow
Topic: 14098 Message: 14105

Boy, will you get a lot of different answers! This is
a low-load, low-speed application,.mostly it needs a grease
that won't dry out or oxidize quickly. Synthetic greases
are probably longer lasting than conventional greases but
even petroleum jelly like Vaseline will work. General
Cement has some stuff called Tuner Lub which is petroleum
jelly with a little anti-oxidant in it. I have some
aviation grease that was recommended in a Collins R-388
handbook. It has very long life and is quite slippery.
Mine is Aeroshell No.7 but the same stuff is made by all the
larger suppliers of lubricants. The detent ball needs very
little grease. You also should get some oil into the shaft
bearing. Here again conventional oil works fine but I have
some stuff made by Kano Labs, a light petroleum oil that
works well. OTOH you can use 3-in-1 20 weight machine oil
(in a Blue can, not the penetrating oil in the Red can)
which works perfectly well. The switch should have some
stiffness to prevent its being turned accidentally and the
detent action should be positive.
The old grease can be cleaned with dry Isopropyl
alcohol, Naphtha (or Ronsonol lighter fluid) or disc brake
cleaner.
Who knows what the original lubricant was.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
----- Original Message -----
From: "Jerry Kimento" <jerrywk1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, May 31, 2013 5:25 PM
Subject: RE: [DrakeRadio] Drake 2B Bandswitch

> What do you use to replace the old grease
>
>
>
> Jerry
>
> Wb9jfr

14106. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:23:48 UTC
From: Garey Barrell
Topic: 14098 Message: 14106

Jerry -

New grease?!... :-)

Sorry, couldn't resist. White lithium grease, some of the hi tech bicycle chain and gear grease, or in most cases a drop of two of 20W
non-detergent motor oil will be fine. It's really not a spot that needs 'super lube'. Whatever you do, do NOT 'spring' the flat detent
spring by prying it up to lessenthe tension onthe ball. Destroys the detent mechanism. Also, PLEASE no WD-40, that's worse than NO lube.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jerry Kimento wrote:
> What do you use to replace the old grease
>
>
>
> Jerry
>
> Wb9jfr
>
>
>
>
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
> Sent: Friday, May 31, 2013 5:59 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
>
>
>
>
> I have often found that the grease has dried out or is missing on the detent at
> the back of the bandswitch on a lot of radios. I clean out the old stuff as best
> I can and replace it. I usually use the end of a toothpick to place a dab of
> grease into the cups for the detent ball.
>

> _____
> From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Fri, May 31, 2013 3:42:58 PM
> Subject: [DrakeRadio] Drake 2B Bandswitch
>
>
> I have a Drake 2B. The band switch is functional but changes bands not as smooth
> as I think it should. What can be done to make it turn more easily? Tnx for your
> input and suggestions.
>
>

14107. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:22:19 UTC
From: Jim Shorney
Topic: 14007 Message: 14107

Hi Garey,

On Fri, 31 May 2013 10:31:04 -0400, Garey Barrell wrote:

>I've not seen a preponderance of failed 40M (18.1 MHz) crystals in the twins.

I've seen maybe three or four reports of similar failures over the past few years, enough to thorw up a flag in my mind. Maybe I noticed it because I actually have one, but IIRC it seems to be C-line era 40 Meter crystals that sometimes do this. They operate just fine, other than being up to 30 KHz away from where they should be.

>As an aside, I'm hearing more lately from people saying that the twins tuning rate is too fast.

Hah! That's funny. If anything, it seems way too slow when you want to get to the other end of the band in a hurry. IMO, it seems to be a very good compromise between band surfing and speedy QSY.

>Personally, I have no trouble tuning in anything with the twins, but then I developed a 'safe-cracker'stouch' on my BC-453 Novice receiver
>which covered the entire (50 kHz) 80M Novice band in approximately 1/4 of a turn.!

And I was tuning SSB signals on a Hallicrafters S-120 when I was a broke teenager. Modern hams have it too easy....

73

-Jim
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14108. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:37:33 UTC
From: Garey Barrell
Topic: 14098 Message: 14108

Bill -

True... Also withBAND switches consisting of 5 or 6 wafers, the drag of contacts on corroded wipers can add quite a big load. A good
DeoxIT of all contacts can sometimes work wonders!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> I use a white lithium grease that I bought at a local hardware store. If the
> shaft goes through some bushings, you might also try a drop or two of Fader lube
> between the shaft and the bushing and then turn the switch several times. There
> is usually a bushing at the front of a bandswitch where it mounts to the front
> of the chassis. These often can build up some corrosion over time.
>
>
>
>
>
> _____
> From: Jerry Kimento <jerrywk1@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, May 31, 2013 5:26:14 PM
> Subject: RE: [DrakeRadio] Drake 2B Bandswitch
>
>
> What do you use to replace the old grease
>
> Jerry
>
> Wb9jfr
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf
> Of William Houghton
> Sent: Friday, May 31, 2013 5:59 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
> I have often found that the grease has dried out or is missing on the detent at
> the back of the bandswitch on a lot of radios. I clean out the old stuff as best
>

> I can and replace it. I usually use the end of a toothpick to place a dab of
> grease into the cups for the detent ball.
>
> _____
> From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Fri, May 31, 2013 3:42:58 PM
> Subject: [DrakeRadio] Drake 2B Bandswitch
>
> I have a Drake 2B. The band switch is functional but changes bands not as smooth
>
> as I think it should. What can be done to make it turn more easily? Tnx for your
>
> input and suggestions.
>
>

14109. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:43:32 UTC
From: William Houghton
Topic: 14098 Message: 14109

Good to know that, too,
BTW, do you know the size of the self tapping screws used in the TR series to attach the HV cage to the chassis?

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, May 31, 2013 7:37:38 PM
Subject: Re: [DrakeRadio] Drake 2B Bandswitch

Bill -

True... Also withBAND switches consisting of 5 or 6 wafers, the drag of contacts on corroded wipers can add quite a big load. A good

DeoxIT of all contacts can sometimes work wonders!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> I use a white lithium grease that I bought at a local hardware store. If the
> shaft goes through some bushings, you might also try a drop or two of Fader
>lube
> between the shaft and the bushing and then turn the switch several times.
There
> is usually a bushing at the front of a bandswitch where it mounts to the front
> of the chassis. These often can build up some corrosion over time.
>
>
>
>
>
> ---
> From: Jerry Kimento <jerrywk1@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, May 31, 2013 5:26:14 PM
> Subject: RE: [DrakeRadio] Drake 2B Bandswitch
>
>
> What do you use to replace the old grease
>
> Jerry

>
> Wb9jfr
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf
> Of William Houghton
> Sent: Friday, May 31, 2013 5:59 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
> I have often found that the grease has dried out or is missing on the detent
at
> the back of the bandswitch on a lot of radios. I clean out the old stuff as
>best
>
> I can and replace it. I usually use the end of a toothpick to place a dab of
> grease into the cups for the detent ball.
>
> _____
> From: curtstamp <Curtstamp@aol.com <mailto:Curtstamp%40aol.com> >
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Sent: Fri, May 31, 2013 3:42:58 PM
> Subject: [DrakeRadio] Drake 2B Bandswitch
>
> I have a Drake 2B. The band switch is functional but changes bands not as
>smooth
>
> as I think it should. What can be done to make it turn more easily? Tnx for
>your
>
> input and suggestions.
>
>

[Non-text portions of this message have been removed]

14110. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:44:30 UTC
From: Jim Shorney
Topic: 14098 Message: 14110

On Fri, 31 May 2013 18:45:15 -0700, Richard Knoppow wrote:

>You also should get some oil into the shaft
>bearing. Here again conventional oil works fine but I have
>some stuff made by Kano Labs, a light petroleum oil that
>works well. OTOH you can use 3-in-1 20 weight machine oil
>(in a Blue can, not the penetrating oil in the Red can)
>which works perfectly well.

Back on my Teflon kick again, I really like the PTFE-based oil that I have seen in the small "pinpoint oiler" pens at Ace Hardware, Radio Shack, and (oddly enough) Triflow. This stuff seems to work very well everywhere that I have tried it.

73

-Jim
NU0C

14111. RE: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 02:51:14 UTC
From: Jerry Kimento
Topic: 14098 Message: 14111

Thanks to all

Have 2b , r4b and r4c to lube up

Jerry

Wb9jfr

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of Garey Barrell
Sent: Friday, May 31, 2013 9:24 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Drake 2B Bandswitch

Jerry -

New grease?!... :-)

Sorry, couldn't resist. White lithium grease, some of the hi tech bicycle chain and gear grease, or in most cases a drop of two of 20W
non-detergent motor oil will be fine. It's really not a spot that needs 'super lube'. Whatever you do, do NOT 'spring' the flat detent
spring by prying it up to lessenthe tension onthe ball. Destroys the detent mechanism. Also, PLEASE no WD-40, that's worse than NO lube.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jerry Kimento wrote:
> What do you use to replace the old grease
>
>
>
> Jerry
>
> Wb9jfr
>
>
>
>
>
> From: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
[mailto:DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>] On Behalf Of

William Houghton
> Sent: Friday, May 31, 2013 5:59 PM
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
> Subject: Re: [DrakeRadio] Drake 2B Bandswitch
>
>
>
>
>
> I have often found that the grease has dried out or is missing on the detent at
> the back of the bandswitch on a lot of radios. I clean out the old stuff as best
> I can and replace it. I usually use the end of a toothpick to place a dab of
> grease into the cups for the detent ball.
>
> _____
> From: curtstamp <Curtstamp@... <mailto:Curtstamp%40aol.com> <mailto:Curtstamp%40aol.com>
>
> To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
<mailto:DrakeRadio%40yahoogroups.com>
> Sent: Fri, May 31, 2013 3:42:58 PM
> Subject: [DrakeRadio] Drake 2B Bandswitch
>
>
> I have a Drake 2B. The band switch is functional but changes bands not as smooth
> as I think it should. What can be done to make it turn more easily? Tnx for your
> input and suggestions.
>
>

[Non-text portions of this message have been removed]

14112. Re: [DrakeRadio] Drake 2B Bandswitch

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 03:04:40 UTC
From: Garey Barrell
Topic: 14098 Message: 14112

Bill -

I think they are #2. Possibly #4, but that's probablythe tube sockets.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Good to know that, too,
> BTW, do you know the size of the self tapping screws used in the TR series to
> attach the HV cage to the chassis?
>
>

14113. Side Tone Mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 08:06:05 UTC
From: Richard Knoppow
Topic: 14113 Message: 14113

I may have found my own answer. I read through the
"Drakemod" document in Garey's CD. The mod is mentioned
there as a way to eliminate feedthrough of the CW side tone
in standby mainly on the T-4C. I don't have this problem on
my T-4XB so, unless its for something else, I will just
leave it alone.
BTW, if you have the CD make sure to read _everything_
in it. There is a lot of hidden wisdom that you will miss if
you just look at the instruction books and service manual.
If you don't have the CD _get it_!!!

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14114. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 19:00:46 UTC
From: <w1es1982@...>
Topic: 14007 Message: 14114

Well, if it's already a dud, I can't possibly have anything to lose :)

Most of the older crystals had cases you could open, with screws, so I can take my chances...

73,

Steve, W1ES/4

---- David Winfree <dmw11038@...> wrote:
> In the old days, I used a Hewlett Packard 4815A to look at basic crystal
> parameters, the key one being series R equiv. The 4815 is long obsolete,
> so you can find these for sub $100. Sometime in the late '70s, production
> crystals started using resistance welded cases, moving away from soldered
> cases. THose will present a issue for dissasssembly. I don't know
> exactly what backfill gas was used, but I'm thinking He to aid in leak
> detection, or at least dry nitrogen. I'd be reluctant to use basement air
> inside the crystal for best aging life. It doesn't take even a visual
> corrosion product to move a xtal resonant freq.
>
>
> On Wed, May 29, 2013 at 11:07 AM, Garey Barrell <k4oah@...>wrote:
>
> > **
> > >
> > >
> > > Steve -
> > >
> > > Might be interesting..... A small torch or big iron, maybe a Hakko 808
> > > around the edges, wouldn't be too difficult. I guess I'd start by
> > > dipping in a solvent, alcohol, acetone, QD electronic cleaner, etc. If no
> > > luck, a shot in the ultrasonic cleaner. Then ... ?
> > >
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > Steve Wedge wrote:
> > > > Yeah, that's what I'm figuring. My first set of Twins I bought in NC,
> > > back in '07, had two bad crystals. At least a couple more R-4B's have had
> > > dead ones, a TR-4 I haven't started working on yet has a bad 15m, T-4X had
> > > a bad 15m, another Twin with a bad 15m and others pulled from accessory

> > sockets have also been duds. I find I'm changing crystals almost as much as
> > I'm changing tubes!
> > >
> > > I suspect there's no real way of repairing these without specialized
> > equipment, is there? I'd have to get the case off first - Bernz-O-Matic?
> > Might be instructional if nothing else
> > >
> > > Steve Wedge, W1ES/4
> > >
> > > Time flies like an arrow; fruit flies like a banana.
> > >
> > >
> > > All my computers have my signature with various pearls of wisdom
> > appended thereto.
> > >
> > >
> > >
> > > From: Garey Barrell
> > > Sent: Wednesday, May 29, 2013 9:40 AM
> > > To: DrakeRadio@yahoogroups.com
> > > Subject: Re: [DrakeRadio] Crystal reliability.
> > >
> > >
> > >
> > > Steve -
> > >
> > > That has not been my experience. Yes, they age (up in frequency,
> > sometimes several kHz) but I don't see that many actually fail. A
> > > shortage of gain in the oscillator can cause that, but I'm sure you've
> > tried them in more than one radio.
> > >
> > > As for the CAR OSC crystal, it's at 5 MHz, and so is a much larger, more
> > rugged chunk of crystal than 20 and 30 MHz 3rd overtone types.
> > > Especially dying after shipping. Complete failure would almost certainly
> > be a mechanical problem, fractured crystal, broken weld, etc.
> > >
> > > 73, Garey - K4OAH
> > > Glen Allen, VA
> > >
> > > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > > and TR-4/C Service Supplement CDs
> > > <www.k4oah.com>
> > >
> > > Steve Wedge wrote:
> > >> I've noticed that the plugin crystals - both the regular bands and
> > accessories, seem to go bad a lot. I just sold one that was working, sent
> > it in lots of bubble wrap and it was doa. I've got a pile of about half a
> > dozen dead rocks from as many radios.
> > >>
> > >> Has anyone else noticed this sort of failure rate? These seem to be bad

> > more than even tubes. Is it an age-related issue? Why don't the carrier
> > oscillator xtals seem to go bad?
> > >>
> > >> Steve Wedge, W1ES/4
> > >> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
> > >>
> > >> ------------------------------------
> > >>
> > >> Yahoo! Groups Links
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> > > [Non-text portions of this message have been removed]
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> > > Yahoo! Groups Links
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> > [Non-text portions of this message have been removed]
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> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >

14115. Re: [DrakeRadio] Crystal reliability.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 19:24:48 UTC
From: Richard Knoppow
Topic: 14007 Message: 14115

The crystals with screws in them are mostly not plated
but are in sandwich holders. The crystals can be removed
and cleaned and the holder plates can be cleaned. If they
are dead or have low activity they are often just dirty.
They can be cleaned with alcohol. An enormous number of
crystals of various typed cam on the surplus market
following WW-2, the ham magazines of the time had many
articles about how to modify them for ham use. I don't have
specific articles in mind but a survey of the cumulative
indices of QST, etc, should find a bunch.
Crystals come in various "cuts" which have different
characteristics. The ones available now are often cut so
that they have virtually zero frequency shift with
temperature, some of the older crystals move around quite a
bit.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

----- Original Message -----
From: <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Cc: "David Winfree" <dmw11038@...>
Sent: Saturday, June 01, 2013 12:00 PM
Subject: Re: [DrakeRadio] Crystal reliability.

> Well, if it's already a dud, I can't possibly have
> anything to lose :)
>
> Most of the older crystals had cases you could open, with
> screws, so I can take my chances...
>
> 73,
>
> Steve, W1ES/4

14116. Re: tuner?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-01 19:30:33 UTC
From: aa5wg
Topic: 14071 Message: 14116

The Universal Link Antenna Tuner is a mechanically and electrically balanced tuner that will serve you for years. There are several circuits that may be used with open wire feeders, coax or single wire feed.

This link coupler shines while using balanced feeders. I read the "normal" link antenna tuner is a better choice than the Z tuner.

Chuck

--- In DrakeRadio@yahoogroups.com, Mikey <m.bunner1@...> wrote:
>
>
> im putting a drake station together a little at a time.a homebrew qro tuner will be my winter project.anyone have any input on a good design? Im kinda interested in a z tuner by a guy down in texas. Thanx, mike
>

14117. TR-4 output issue on 40, 29, &15M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-02 14:09:24 UTC
From: lonelyone_64109
Topic: 14117 Message: 14117

I have been working on a friend's TR4 as it had sat in storage for over 15 years. Once the bad tubes were changed out, all switches sprayed with DeOxit and the AC-3 recapped the rig is working and sounds pretty good. The audio output is a little low but he gets good reports on the air so it is not a big deal.The other day he brought the rig over for an output issue on 40, 20,and 15.

With the XMIT gain control fuly counterclockwise when you switch to the X-CW position the rig shows 350 mA on the plate current and full output, like it had already been tuned up which it hadn't been yet.On 80 and 10 meters the rig performs normally, running about 100 mA with the gain all the way down (not tuned up yet). You can tune the rig normally on 80 & 10M. However when you're set for 40, 20, or 15 the rig acts as if it had already been tuned.If you attempt to tune it naturally the plate current will increase to 600 mA which would destroy the finals in short order.I went down to 10M and checked the neutralization and it did not need to be redone (as far as I could ascertain). The full output problem occurs on both his AC-3 power supply as well as my AC4 (mine has the AC-4R board mod). I wonder if something is shorted (dirty switch or pot or even a neutralization issue?)as its been 4 months since I brought the rig back to life.Could possibly be something going into oscillation? Jim had mentioned hearing a tone (not the calibrator) on 40 but I wasn't able to recreate the tone.He might have been picking up a local birdie from some neighbor's home electronic gadgets. Lord knows all the things that are on the market that can cause RF problems.

I do remember when I first got the rig back up there was a sudden jump in plate current (to 600 mA) on either 40 or 20 (I don't remember which) and I took that to be a neutralization issue. Since the rig had sat unused for many many years in a less than ideal storage (unheated garage or damp basement)I expected a LOT more issues with it than what I found.

Cosmetically its a little on the rough side and the copper chassis is dirty topside and the case needs to be repainted. But if you look under the chassis it is a very clean radio with no signs of modification except for the fan mod I put in when I had the rig.He even has the DC mobile PS as well as the noise blanker (what I would do to have a blanker!!!) for the radio as it had been used as a mobile many years ago by another ham who sold him the radio.

I will be checking into the Drake net this afternoon as well to see what I can find out (propagation willing!).Thanks for your help.

73,
Paul WB0CJB

14118. Re: [DrakeRadio] TR-4 output issue on 40, 29, &15M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-02 14:34:08 UTC
From: Doug
Topic: 14117 Message: 14118

Paul,

Can you adjust the preselector and get the plate current to a safe level? The one that I rebuilt, the carrier balance and balance modulator alignment was way off. It was trying to transmit a carrier an SSB driving the current way up. As soon as I aligned it this went away.

For testing I was able to Detune the preselector TO bring the plate current down, adjust plate for dip and then tune everything for resonance to protect finals. I was then able to make the alignment changes.

Your symptoms are identical to mine but I may be incorrect for your situation. Garey and the others will have the correct solution shortly.

Doug -N9XTF

Sent from my iPhone

On Jun 2, 2013, at 10:09, "lonelyone_64109" <lonelyone_64109@...> wrote:

> I have been working on a friend's TR4 as it had sat in storage for over 15 years. Once the bad tubes were changed out, all switches sprayed with DeOxit and the AC-3 recapped the rig is working and sounds pretty good. The audio output is a little low but he gets good reports on the air so it is not a big deal.The other day he brought the rig over for an output issue on 40, 20,and 15.
>
> With the XMIT gain control fuly counterclockwise when you switch to the X-CW position the rig shows 350 mA on the plate current and full output, like it had already been tuned up which it hadn't been yet.On 80 and 10 meters the rig performs normally, running about 100 mA with the gain all the way down (not tuned up yet). You can tune the rig normally on 80 & 10M. However when you're set for 40, 20, or 15 the rig acts as if it had already been tuned.If you attempt to tune it naturally the plate current will increase to 600 mA which would destroy the finals in short order.I went down to 10M and checked the neutralization and it did not need to be redone (as far as I could ascertain). The full output problem occurs on both his AC-3 power supply as well as my AC4 (mine has the AC-4R board mod). I wonder if something is shorted (dirty switch or pot or even a neutralization issue?)as its been 4 months since I brought the rig back to life.Could possibly be something going in to oscillation? Jim had mentioned hearing a tone (not the calibrator) on 40 but I wasn't able to recreate the tone.He might have been picking up a local birdie from some neighbor's home electronic gadgets. Lord knows all the things that are on the market that can cause RF problems.
>
> I do remember when I first got the rig back up there was a sudden jump in plate current (to 600 mA) on either 40 or 20 (I don't remember which) and I took that to be a neutralization issue. Since the rig had sat unused for many many years in a less than ideal storage (unheated garage or damp basement)I expected a LOT more issues with it than what I found.

>
> Cosmetically its a little on the rough side and the copper chassis is dirty topside and the case needs to be repainted. But if you look under the chassis it is a very clean radio with no signs of modification except for the fan mod I put in when I had the rig.He even has the DC mobile PS as well as the noise blanker (what I would do to have a blanker!!!) for the radio as it had been used as a mobile many years ago by another ham who sold him the radio.
>
> I will be checking into the Drake net this afternoon as well to see what I can find out (propagation willing!).Thanks for your help.
>
> 73,
> Paul WB0CJB
>
>

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http://www.pdswireless.com

[Non-text portions of this message have been removed]

14119. Re: [DrakeRadio] TR-4 output issue on 40, 29, &15M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-02 14:45:07 UTC
From: Garey Barrell
Topic: 14117 Message: 14119

Paul -

Sounds like the PA (or even Driver) are oscillating somewhere outside the range of the matching networks. From your description it's most
likelyabad ground. Have you done the 'screwdriver on every ground lug or shield fastener, loosen and retighten' process yet??

With the GAIN at minimum, you should see, 'exactly' 100 mA, as that is the specified idle current for the PA tubes. Adjusted with the BIAS
control on the AC-3/4.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

lonelyone_64109 wrote:
> I have been working on a friend's TR4 as it had sat in storage for over 15 years. Once the bad tubes were changed out, all switches sprayed with DeOxit and the AC-3 recapped the rig is working and sounds pretty good. The audio output is a little low but he gets good reports on the air so it is not a big deal.The other day he brought the rig over for an output issue on 40, 20,and 15.
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>
> I will be checking into the Drake net this afternoon as well to see what I can find out (propagation willing!).Thanks for your help.
>
> 73,
> Paul WB0CJB
>

14120. ICM EX Modules

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-02 23:34:36 UTC
From: Garey Barrell
Topic: 14120 Message: 14120

I don't know if it was this group or not, but a while back someone was looking for information on the ICM EX 'Experimenter' modules.

I just came across an ad for them describing five (5) types.

If anyone is still looking or has any interest I'd be glad to forward the ad from Ham Radio magazine.

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14121. Re: TR-4 output issue on 40, 29, &15M

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-02 23:36:42 UTC
From: lonelyone_64109
Topic: 14117 Message: 14121

I haven't tried the "loosen and retighten every ground connection" but it does seem a possibility, given the dirty chassis. With it being stored in a damp garage or even basement its very possible the grounds has become corroded.I do remeber seeing that green color on some places so naturally thats an indication of corrosion.

I haven't gone in and done any realignment yet. At the time I didn't feel it was necessary due to the output it was showing. But I will check with Jim and see if he might have tweaked anything that could make it go into oscillation. I doubt that he has but I will check just to make sure. With the upcoming Field Day I will have to wait until afterwards to get the radio back and do these checks on it. Thanks for the input and I will let you all know how it comes out.

I can ask him on the way to work tomorrow morning on the local repeater.Thanks guys!!!

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Paul -
>
> Sounds like the PA (or even Driver) are oscillating somewhere outside the range of the matching networks. From your description it's most
> likelyabad ground. Have you done the 'screwdriver on every ground lug or shield fastener, loosen and retighten' process yet??
>
> With the GAIN at minimum, you should see, 'exactly' 100 mA, as that is the specified idle current for the PA tubes. Adjusted with the BIAS
> control on the AC-3/4.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
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> lonelyone_64109 wrote:
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> > I will be checking into the Drake net this afternoon as well to see what I can find out (propagation willing!).Thanks for your help.
> >
> > 73,
> > Paul WB0CJB
> >
>

14122. 17 meter crystal for sale

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 18:01:03 UTC
From: yash@aol.com
Topic: 14122 Message: 14122

Have a extra 17 meter crystal for drake r-4 line. 29.1 covers 18000 to 18500 asking 20.00
please get back off list.
thanks
dale wt4t

[Non-text portions of this message have been removed]

14123. Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 21:28:19 UTC
From: Chris Farley
Topic: 14123 Message: 14123

We've all seen or heard about things that happen at hamfest that make us laugh, cringe, bawl, weep, or fall over on the floor in sheer pain. My personal topper happened this last Sunday at the Princeton, IL hamfest.

I drove the hour long trek with two fellow ham passengers in the old Chevy, and arrived at the fairgrounds about 7:30AM. We parked the car in a nice high traffic spot, as I had some junk to peddle out of my trunk. I made a quick round, found a nice big piece of Air-Dux in the box for $5, and emptied the contents of my trunk on the grass. I commenced to wander around in search of some more treasures I can't live without, by this time it was past 8 and the building with commercial vendors was open to the generous public. I wandered inside, and spotted a table with anchor-type schtuff. All right, some real radios! I promptly asked about the Henry 2K, Drake twins on the floor, and Hallicrafters S-20R also on the floor. I immediately bought the Halli for the asking price of $5, the gentleman to my left without skipping a beat interrupted and asked about the Tail Twister rotator and two control boxes sitting next to it, and promptly purchased for
the asking price of $25. The Drake twins had been sold, and we had a lengthy conversation about the Henry 2K, and my hesitation due to the "unobtanium" 8873 tubes it uses.

After reluctantly and graciously passing on the Henry, (he wasn't crazy on the price but it wasn't _quite_ a give-away..), I crouched down to pick up my bargain S-20R. Against my better judgement, I took a closer look at the Drakes. There was a TX-4B, R-4B, MS-4 speaker and AC-4 power supply. They were in quite remarkable condition aside from some dust, and the receiver was chock full of band crystals.

Against my better judgement, I said "Out of curiousity, may I ask what you got for the Drakes?"

"$30."

Yes.

Thirty flipping US Dollars. For the whole set.

I literally put my hand on the floor to keep from falling over, my jaw following suit.

That is the closest I have _ever_ been to being that jerkwad who says, "No, you didn't. Here- Here's $200, NOW they're sold." It took a lot of willpower to get back on my feet, and walk away with that measly little Halliscratchers after that..

A word of advise...
If you buy something at a hamfest for such a RIDICULOUS price you can't quite believe it yourself, do yourself and everybody else a favor. Pay the man, pick it up, and RUN. Do NOT leave it sitting there for an hour or more. You'll either make a bunch of people sick to their stomachs, or some so-and-so will find a way to buy it out from under you.

This one will be at the top of the list for many, many years I believe.

Regards,
Chris kc9ieq

[Non-text portions of this message have been removed]

14124. power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 22:26:28 UTC
From: yash@aol.com
Topic: 14124 Message: 14124

Iam finishing the recap of my late ac-3. I was curious about a add-on to the plug. there was a 30" section of RG-58 with a male rca ,on the end . the center was soldered to pin 8 and the braid to pin5. anybody have any idea what the rg-58 was used for?
dale wt4t

[Non-text portions of this message have been removed]

14125. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 22:41:38 UTC
From: Dan Galligan
Topic: 14124 Message: 14125

If I am wrong, someone will correct me, I am sure. But, I do believe that this plug is typically a female RCA, used for the speaker, on a transceiver (TR3/TR4, etc). At least on an AC4, that's the way it is. The last person to work on that one, before you, likely had an abundance of RG-58, and just used it as shielded speaker cable.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 3, 2013, at 15:26, "yash@..." <yash@...> wrote:

> Iam finishing the recap of my late ac-3. I was curious about a add-on to the plug. there was a 30" section of RG-58 with a male rca ,on the end . the center was soldered to pin 8 and the braid to pin5. anybody have any idea what the rg-58 was used for?
> dale wt4t
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14126. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 22:57:36 UTC
From: William Houghton
Topic: 14124 Message: 14126

Dale,

If that is the supply you got from me, I appologize I had intended to tell you about it. I traced that back and it is a connection to the VOX relay on TR-4's and TR-4C's. AC-3's don't have the VOX relay connection on the supply like the AC-4's do.

The VOX relay is a set of floating contacts that close when the xmtr is keyed. They are typically used to key an amplifier.

73,

Bill

From: "yash@..." <yash@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, June 3, 2013 3:26:39 PM
Subject: [DrakeRadio] power plug on late ac-3

Iam finishing the recap of my late ac-3. I was curious about a add-on to the plug. there was a 30" section of RG-58 with a male rca ,on the end . the center was soldered to pin 8 and the braid to pin5. anybody have any idea what the rg-58 was used for?
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14127. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 22:59:49 UTC
From: John Lawrence
Topic: 14124 Message: 14127

That is the speaker lead. If you have the AC-3 in a speaker enclosure it plugs into the speaker

On Mon, Jun 3, 2013 at 6:26 PM, yash@... <yash@...> wrote:

> **
>
>
> Iam finishing the recap of my late ac-3. I was curious about a add-on to
> the plug. there was a 30" section of RG-58 with a male rca ,on the end .
> the center was soldered to pin 8 and the braid to pin5. anybody have any
> idea what the rg-58 was used for?
> dale wt4t
>
> [Non-text portions of this message have been removed]
>
>
>

--
John

[Non-text portions of this message have been removed]

14128. TR7 - Loud cw note (birdie?) and computer clock noise.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 00:00:55 UTC
From: aa5wg
Topic: 14128 Message: 14128

Hi to the group,

Today, with the TR7 connected to a Drake 50 ohm dummy load, I noticed two new noises on 40 meters. These noises are still present when the antenna is connected.

There is a noticeable cw note on 7.0545 and 7.199 USB with Pass Band not turned on.

There is a loud kinda computer clock counter noise on 7.1785, 7.248 and 7.3085 with the Pass Band not turned on.

Any ideas how to fix these noises?

Thank you,

Chuck

14129. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 00:18:09 UTC
From: yash@aol.com
Topic: 14124 Message: 14129

Bill
figured out after printing the schematic of the ac-3. had nothing to do with anything normal, both the ac-3 and ac-4 showed no wiring to either of the 2 pins, maybe they started latter. / anyway clipped the wire and just finished changing the caps out , supply works like a champ.
dale wt4t

-----Original Message-----
From: William Houghton <rdrbill@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Jun 3, 2013 6:57 pm
Subject: Re: [DrakeRadio] power plug on late ac-3

Dale,

If that is the supply you got from me, I appologize I had intended to tell you about it. I traced that back and it is a connection to the VOX relay on TR-4's and TR-4C's. AC-3's don't have the VOX relay connection on the supply like the AC-4's do.

The VOX relay is a set of floating contacts that close when the xmtr is keyed. They are typically used to key an amplifier.

73,

Bill

From: "yash@...m" <yash@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, June 3, 2013 3:26:39 PM
Subject: [DrakeRadio] power plug on late ac-3

Iam finishing the recap of my late ac-3. I was curious about a add-on to the plug. there was a 30" section of RG-58 with a male rca ,on the end . the center was soldered to pin 8 and the braid to pin5. anybody have any idea what the rg-58 was used for?
dale wt4t

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14130. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 00:19:47 UTC
From: yash@aol.com
Topic: 14124 Message: 14130

John
the speaker lead go's to pin 7 and 12 ,this was wired to 5 and 8
dale wt4t

-----Original Message-----
From: John Lawrence <ne3e001@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Jun 3, 2013 7:00 pm
Subject: Re: [DrakeRadio] power plug on late ac-3

That is the speaker lead. If you have the AC-3 in a speaker enclosure it
plugs into the speaker

On Mon, Jun 3, 2013 at 6:26 PM, yash@... <yash@...> wrote:

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>
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>
> [Non-text portions of this message have been removed]
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--
John

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14131. power supply boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 00:53:53 UTC
From: yash@aol.com
Topic: 14131 Message: 14131

Can someone send me pauls e mail address ,want to order a set of his rebuild boards for my supply.
thanks
dale wt4t

[Non-text portions of this message have been removed]

14132. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 00:57:23 UTC
From: yash@aol.com
Topic: 14124 Message: 14132

Dan
the wire was connected to pins 5 and 8,the speaker wires go to pins 7 and 12 of the power plug. I was told the wire was for vox control on a late tr-4. somehow. anyway its clipprf now. and supply works fine.

-----Original Message-----
From: Dan Galligan <w3rxo@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Jun 3, 2013 8:50 pm
Subject: Re: [DrakeRadio] power plug on late ac-3

If I am wrong, someone will correct me, I am sure. But, I do believe that this plug is typically a female RCA, used for the speaker, on a transceiver (TR3/TR4, etc). At least on an AC4, that's the way it is. The last person to work on that one, before you, likely had an abundance of RG-58, and just used it as shielded speaker cable.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 3, 2013, at 15:26, "yash@..." <yash@aol.com> wrote:

> Iam finishing the recap of my late ac-3. I was curious about a add-on to the plug. there was a 30" section of RG-58 with a male rca ,on the end . the center was soldered to pin 8 and the braid to pin5. anybody have any idea what the rg-58 was used for?
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[Non-text portions of this message have been removed]

14133. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 01:02:54 UTC
From: Garey Barrell
Topic: 14124 Message: 14133

Pins 5 and 8 are the Linear keying contacts that come from the T-4X(any)/ TR-4(any) relay. In the AC-4 they were wired to that silly little
two pin connector on the AC-4. There was no such connector on the AC-3, because it was designed for the TR-3 which had no capability to key
an external amp. The pigtail out the back of that connector was for the speaker output of the TR-3, the idea being a single connector to
pull or plug in when installing or removing the transceiver. Aside from the UHF antenna connector of course. Those of uswho got AC-3s with
our early T-4Xs and wanted to use linear amps, either rewired the 'RCA pigtail' out of the back of the transmitter end Jones connector, or
added another pigtail for that function.

I've never seen an AC-4 connector that did NOT have Pins 5 & 8 wired to the VOX connector. Both pins were isolated from ground by the way,
so that polarity was not important for the non-keyed two pin connector.

Again, the TR-3 was designed as a MOBILE SSB transceiver, so not likely to need to key an external amplifier!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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yash@... wrote:
> Bill
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>
>
> -----Original Message-----
> From: William Houghton <rdrbill@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Mon, Jun 3, 2013 6:57 pm
> Subject: Re: [DrakeRadio] power plug on late ac-3
>
>
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> Dale,
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> Bill
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> _____
> From: "yash@..." <yash@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Mon, June 3, 2013 3:26:39 PM
> Subject: [DrakeRadio] power plug on late ac-3
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> dale wt4t
>
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14134. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 01:03:38 UTC
From: Jim Shorney
Topic: 14123 Message: 14134

On Mon, 3 Jun 2013 14:28:19 -0700 (PDT), Chris Farley wrote:

>Against my better judgement, I said "Out of curiousity, may I ask what you got for the Drakes?"
>
>"$30."

This is why I get to 'fests early. AS in, Lined up at the door waiting to get in. I don't always get deals that way, but that's how I scored my HyGain 3750...

73

-Jim
NU0C

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

14135. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 01:06:13 UTC
From: yash@aol.com
Topic: 14124 Message: 14135

Garey
I have a late ac-3,not a ac-4.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Jun 3, 2013 9:03 pm
Subject: Re: [DrakeRadio] power plug on late ac-3

Pins 5 and 8 are the Linear keying contacts that come from the T-4X(any)/ TR-4(any) relay. In the AC-4 they were wired to that silly little
two pin connector on the AC-4. There was no such connector on the AC-3, because it was designed for the TR-3 which had no capability to key
an external amp. The pigtail out the back of that connector was for the speaker output of the TR-3, the idea being a single connector to
pull or plug in when installing or removing the transceiver. Aside from the UHF antenna connector of course. Those of uswho got AC-3s with
our early T-4Xs and wanted to use linear amps, either rewired the 'RCA pigtail' out of the back of the transmitter end Jones connector, or
added another pigtail for that function.

I've never seen an AC-4 connector that did NOT have Pins 5 & 8 wired to the VOX connector. Both pins were isolated from ground by the way,
so that polarity was not important for the non-keyed two pin connector.

Again, the TR-3 was designed as a MOBILE SSB transceiver, so not likely to need to key an external amplifier!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

yash@... wrote:
> Bill
> figured out after printing the schematic of the ac-3. had nothing to do with anything normal, both the ac-3 and ac-4 showed no wiring to either of the 2 pins, maybe they started latter. / anyway clipped the wire and just finished changing the caps out , supply works like a champ.
> dale wt4t
>
>
>
> -----Original Message-----

> From: William Houghton <rdrbill@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Mon, Jun 3, 2013 6:57 pm
> Subject: Re: [DrakeRadio] power plug on late ac-3
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>
> Dale,
>
> If that is the supply you got from me, I appologize I had intended to tell you
> about it. I traced that back and it is a connection to the VOX relay on TR-4's
> and TR-4C's. AC-3's don't have the VOX relay connection on the supply like the
> AC-4's do.
>
> The VOX relay is a set of floating contacts that close when the xmtr is keyed.
> They are typically used to key an amplifier.
>
> 73,
>
> Bill
>
> _____
> From: "yash@..." <yash@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Mon, June 3, 2013 3:26:39 PM
> Subject: [DrakeRadio] power plug on late ac-3
>
>
> Iam finishing the recap of my late ac-3. I was curious about a add-on to the
> plug. there was a 30" section of RG-58 with a male rca ,on the end . the center
> was soldered to pin 8 and the braid to pin5. anybody have any idea what the
> rg-58 was used for?
> dale wt4t
>
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14136. Re: [DrakeRadio] power plug on late ac-3

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 01:34:13 UTC
From: William Houghton
Topic: 14124 Message: 14136

Garey,

Since I had this very supply before Dale, I can tell you that a previous owner added the RG-58 cable to pins 5 & 8 and installed a male RC plug on that cable. The male plug was probably to keep it from getting confused with the speaker cable. My guess is that a previous owner of this AC-3 wanted to key an amp with the TR-4 that he/she had.

73,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Mon, June 3, 2013 6:03:39 PM
Subject: Re: [DrakeRadio] power plug on late ac-3

Pins 5 and 8 are the Linear keying contacts that come from the T-4X(any)/ TR-4(any) relay. In the AC-4 they were wired to that silly little

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Again, the TR-3 was designed as a MOBILE SSB transceiver, so not likely to need to key an external amplifier!!

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Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Bill
> figured out after printing the schematic of the ac-3. had nothing to do with
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>pins, maybe they started latter. / anyway clipped the wire and just finished
>changing the caps out , supply works like a champ.
> dale wt4t
>
>
>
> -----Original Message-----
> From: William Houghton <rdrbill@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Mon, Jun 3, 2013 6:57 pm
> Subject: Re: [DrakeRadio] power plug on late ac-3
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> Dale,
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> Sent: Mon, June 3, 2013 3:26:39 PM
> Subject: [DrakeRadio] power plug on late ac-3
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14137. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 01:59:33 UTC
From: AA8W
Topic: 14123 Message: 14137

The other side of that is a widow may have lost out.
When a friend on the other side of the state passed away some eight years ago his wife mentioned after the funeral that she was going to take his gear to a local ham-fest. I asked her to wait a while as my wife couldn't make it to the funeral and we would come back in a few weeks for a visit. While the girls were visiting I went to the garage where she said her daughter had staged his equipment. She had actually done a pretty good job of getting things in proper boxes. I got it all together and made an excel spread sheet indicating what accessory's went with what. (Some moduals for a transceiver hadn't been installed.) Then listed fair market values I thought she could get. It came to $6000. A local ham came by looked at the spread sheet and agreed and gave her $4000 on the spot. So he made a few bucks and she had no hassle. I hope someone does that for my wife.
73,
Mike AA8W

On 6/3/2013 5:28 PM, Chris Farley wrote:
> We've all seen or heard about things that happen at hamfest that make us laugh, cringe, bawl, weep, or fall over on the floor in sheer pain. My personal topper happened this last Sunday at the Princeton, IL hamfest.
>
> I drove the hour long trek with two fellow ham passengers in the old Chevy, and arrived at the fairgrounds about 7:30AM. We parked the car in a nice high traffic spot, as I had some junk to peddle out of my trunk. I made a quick round, found a nice big piece of Air-Dux in the box for $5, and emptied the contents of my trunk on the grass. I commenced to wander around in search of some more treasures I can't live without, by this time it was past 8 and the building with commercial vendors was open to the generous public. I wandered inside, and spotted a table with anchor-type schtuff. All right, some real radios! I promptly asked about the Henry 2K, Drake twins on the floor, and Hallicrafters S-20R also on the floor. I immediately bought the Halli for the asking price of $5, the gentleman to my left without skipping a beat interrupted and asked about the Tail Twister rotator and two control boxes sitting next to it, and promptly purchased for
> the asking price of $25. The Drake twins had been sold, and we had a lengthy conversation about the Henry 2K, and my hesitation due to the "unobtanium" 8873 tubes it uses.
>
> After reluctantly and graciously passing on the Henry, (he wasn't crazy on the price but it wasn't _quite_ a give-away..), I crouched

> down to pick up my bargain S-20R. Against my better judgement, I took
> a closer look at the Drakes. There was a TX-4B, R-4B, MS-4 speaker
> and AC-4 power supply. They were in quite remarkable condition aside
> from some dust, and the receiver was chock full of band crystals.
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> Against my better judgement, I said "Out of curiousity, may I ask what
> you got for the Drakes?"
>
> "$30."
>
> Yes.
>
> Thirty flipping US Dollars. For the whole set.
>
> I literally put my hand on the floor to keep from falling over, my jaw
> following suit.
>
> That is the closest I have _ever_ been to being that jerkwad who says,
> "No, you didn't. Here- Here's $200, NOW they're sold." It took a lot
> of willpower to get back on my feet, and walk away with that measly
> little Halliscratchers after that..
>
> A word of advise...
> If you buy something at a hamfest for such a RIDICULOUS price you
> can't quite believe it yourself, do yourself and everybody else a
> favor. Pay the man, pick it up, and RUN. Do NOT leave it sitting
> there for an hour or more. You'll either make a bunch of people sick
> to their stomachs, or some so-and-so will find a way to buy it out
> from under you.
>
> This one will be at the top of the list for many, many years I believe.
>
> Regards,
> Chris kc9ieq
>

[Non-text portions of this message have been removed]

14138. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 02:01:18 UTC
From: Doug
Topic: 14123 Message: 14138

Other than new product deals at the hamfests local to Indy, I have never found one reasonable deal on used gear. Amplifiers are always almost non existent and the used radios are always way over priced junk. I quit going years ago unless there's a new product I want to buy.

Sent from my iPhone

On Jun 3, 2013, at 17:28, Chris Farley <vacuuminded2@...> wrote:

> We've all seen or heard about things that happen at hamfest that make us laugh, cringe, bawl, weep, or fall over on the floor in sheer pain. My personal topper happened this last Sunday at the Princeton, IL hamfest.
>
> I drove the hour long trek with two fellow ham passengers in the old Chevy, and arrived at the fairgrounds about 7:30AM. We parked the car in a nice high traffic spot, as I had some junk to peddle out of my trunk. I made a quick round, found a nice big piece of Air-Dux in the box for $5, and emptied the contents of my trunk on the grass. I commenced to wander around in search of some more treasures I can't live without, by this time it was past 8 and the building with commercial vendors was open to the generous public. I wandered inside, and spotted a table with anchor-type schtuff. All right, some real radios! I promptly asked about the Henry 2K, Drake twins on the floor, and Hallicrafters S-20R also on the floor. I immediately bought the Halli for the asking price of $5, the gentleman to my left without skipping a beat interrupted and asked about the Tail Twister rotator and two control boxes sitting next to it, and promptly purchased for
> the asking price of $25. The Drake twins had been sold, and we had a lengthy conversation about the Henry 2K, and my hesitation due to the "unobtanium" 8873 tubes it uses.
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> After reluctantly and graciously passing on the Henry, (he wasn't crazy on the price but it wasn't _quite_ a give-away..), I crouched down to pick up my bargain S-20R. Against my better judgement, I took a closer look at the Drakes. There was a TX-4B, R-4B, MS-4 speaker and AC-4 power supply. They were in quite remarkable condition aside from some dust, and the receiver was chock full of band crystals.
>
> Against my better judgement, I said "Out of curiousity, may I ask what you got for the Drakes?"
>
> "$30."
>
> Yes.
>
> Thirty flipping US Dollars. For the whole set.
>
> I literally put my hand on the floor to keep from falling over, my jaw following suit.
>
> That is the closest I have _ever_ been to being that jerkwad who says, "No, you didn't. Here- Here's $200, NOW they're sold." It took a lot of willpower to get back on my feet,

and walk away with that measly little Halliscratchers after that..
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> A word of advise...
> If you buy something at a hamfest for such a RIDICULOUS price you can't quite believe it yourself, do yourself and everybody else a favor. Pay the man, pick it up, and RUN. Do NOT leave it sitting there for an hour or more. You'll either make a bunch of people sick to their stomachs, or some so-and-so will find a way to buy it out from under you.
>
> This one will be at the top of the list for many, many years I believe.
>
> Regards,
> Chris kc9ieq
>
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PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

14139. Re: [DrakeRadio] power supply boards

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 02:11:05 UTC
From: Paul Kraemer
Topic: 14131 Message: 14139

elespe@...
Thanks
Paul K0UYA
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, June 03, 2013 7:53 PM
Subject: [DrakeRadio] power supply boards

> Can someone send me pauls e mail address ,want to order a set of his
> rebuild boards for my supply.
> thanks
> dale wt4t
>
>
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14140. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 02:23:27 UTC
From: Jim Shorney
Topic: 14123 Message: 14140

The hamfests around here have been generally picking back up, although some years are better than others. I've had sellers tell me on more than one occasion that they are fed up with eBay. Sure, there is overpriced stuff, and junk, and both. But there are also deals to be had. I came within centimeters of buying a nice NCL-2000 last year for a very reasonable price, but I already have three amplifiers. Sometimes I still wish I had bought it...

73

-Jim
NU0C

On Mon, 3 Jun 2013 22:01:18 -0400, Doug wrote:

>Other than new product deals at the hamfests local to Indy, I have never found one reasonable deal on used gear. Amplifiers are always almost non existent and the used radios are always way over priced junk. I quit going years ago unless there's a new product I want to buy.

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

14141. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 03:16:55 UTC
From: Paul Kraemer
Topic: 14123 Message: 14141

What saddens me is that so often some offspring on a mission barges in and orders all that junk of dad's removed---NOW---so we can sell the house and get the heck out of here back to OUR lives.
That is sad. I had offered to help a widow a few years back and working from a list had offered a pretty fair price for everything plus a comission on what I sold. It was done deal but missy daughter (miss organization) blew in from another state and beat down mom about needing to get that crap out of the house so as to not delay the listing process so they could move mom to the senior home where she belonged.
Because of a severe winter storm I couldn't drop everything to travel across the state to pick it up and it went for junk, but it was gone immediately. And I'll bet dollars to donuts missy ain't been back since to see mom in her new apartment where she stuck her---out of the way.
That's what raises my ire.
I know, I got three of them that won't be any different but I am not giving up what makes me happy so they will have an easy time when I am gone. Just ain't gonna happen.
Paul K0UYA

----- Original Message -----
From: "AA8W" <aa8w@...>
To: <DrakeRadio@yahoogroups.com>
Cc: "Chris Farley" <vacuuminded2@...>
Sent: Monday, June 03, 2013 8:59 PM
Subject: Re: [DrakeRadio] Hamfest stories that make you cry

> The other side of that is a widow may have lost out.
> When a friend on the other side of the state passed away some eight
> years ago his wife mentioned after the funeral that she was going to
> take his gear to a local ham-fest. I asked her to wait a while as my
> wife couldn't make it to the funeral and we would come back in a few
> weeks for a visit. While the girls were visiting I went to the garage
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> done a pretty good job of getting things in proper boxes. I got it all
> together and made an excel spread sheet indicating what accessory's went
> with what. (Some moduals for a transceiver hadn't been installed.)
> Then listed fair market values I thought she could get. It came to
> $6000. A local ham came by looked at the spread sheet and agreed and
> gave her $4000 on the spot. So he made a few bucks and she had no
> hassle. I hope someone does that for my wife.
> 73,
> Mike AA8W
>
>
> On 6/3/2013 5:28 PM, Chris Farley wrote:

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>> us laugh, cringe, bawl, weep, or fall over on the floor in sheer
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>> trunk. I made a quick round, found a nice big piece of Air-Dux in the
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>> A word of advise...

>> If you buy something at a hamfest for such a RIDICULOUS price you
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>> This one will be at the top of the list for many, many years I believe.
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>> Regards,
>> Chris kc9ieq
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14142. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 04:45:06 UTC
From: Joe - W7RKN
Topic: 14123 Message: 14142

I have been lucky. I have picked up things just by being in the right place at the right time. Saw an ad in our local ham clubs' newsletter, about a widow of an SK that needed help cleaning out her husband's shack. I found out several weeks later that no one had responded so I volunteered to go up and help out. I was the only one to show up. Took half a day..the guy was an 'old school' Extra..had a parts department in his shack, that when loaded into the back of my full sized pickup, filled half of it! He had at least 300 pounds of homebrew yagi's and verticals. Also had 2 SB-200's (Both pristine)and an unbuilt SB-220, both with beau-coup, NOS tubes, still in boxes. (The 3-500z's were still packed in sawdust!) He also had several unbuilt Cantena's as well as a partially built IM-28 VTVM (I finished it first thing..works great..even had an RF Probe that hadn't been assembled yet!), and a Heath scope with no label. I think it is an IO-17. He had 2 Kenwood TS-820(S)' [the models with the digi readout!], that looked as if they had just come off a dealer's display shelf, and in an unopened box, a brand new PalStar AT2K tuner. Long story short, After all was loaded, I asked her how she want me to handle selling everything, ie: best price, posted price, or what? She looked at me and said, "Oh no, I am **GIVING** this too you. I don't want any of it." I asked her if she was sure, and she said yes. She is quite wealthy..lives in a 4 million dollar house on North Shore, Lake Tahoe. So, Because I went and no one else felt like helping out an old wider lady...I cleaned up. Both 820(S)'s work fine..in fact, I used one when my TS-2000 took a lightning hit and had to go to Doctor Clif to get repaired. The SB-220 is in my closet..someday I will build it...One SB-200 I donated to Navy MARS here, the other is on, sorta a permanent loan, to a very good friend of mine who can't afford many 'toys'..

Heh...won't tell you how I acquired my 2nd L-4B...I think I told Garey at one time, but that's another story.

Yes, I have been very lucky over the years....Everyone tells me I should try my hand at gambling, as I live in Reno...no thank you....I like to get things for my money! LOL.

Joe - W7RKN

----- Original Message -----
From: "Paul Kraemer" <elespe@...>
Subject: Re: [DrakeRadio] Hamfest stories that make you cry

> What saddens me is that so often some offspring on a mission barges in and
> orders all that junk of dad's removed---NOW---so we can sell the house and
> get the heck out of here back to OUR lives.
> That is sad. I had offered to help a widow a few years back and working
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> comission

> on what I sold. It was done deal but missy daughter (miss organization)
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> out of the house so as to not delay the listing process so they could move
> mom to the senior home where she belonged.
> Because of a severe winter storm I couldn't drop everything to travel
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> the state to pick it up and it went for junk, but it was gone immediately.
> And I'll bet dollars to donuts missy ain't been back since to see mom in
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> new apartment where she stuck her---out of the way.
> That's what raises my ire.
> I know, I got three of them that won't be any different but I am not
> giving
> up what makes me happy so they will have an easy time when I am gone. Just
> ain't gonna happen.
> Paul K0UYA
>

14143. Re: [DrakeRadio] TR7 - Loud cw note (birdie?) and computer clock noise.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 04:48:40 UTC
From: Jim Shorney
Topic: 14128 Message: 14143

Chuck,

I just went and checked mine. I'm hearing one at 7.054-ish that sounds loud, but doesn't move the S-Meter. Also hear the noise at 7.1785, but not as loud as the other. Signals at the other frequencies are either non-existant or so weak as to be questionable whether it is really there or not.

If yours are stronger than that, there may be a couple of things you can check. Strange 7-line problems are often cured by simply re-seating all of the plug-in boards, or cleaning the contacts and then re-seating. You will want to make sure that the copper grounding fingers attached to some of the boards are clean and making good contact with the frame when the board is inserted. The screws securing the card cage cover should be *snug*, but do not over-tighten or they will strip. Check all grounding screws throughout the radio by slightly loosening them and snugging them back up.

In the end, there may not be a lot that can be done. Signals of this type tend to go with the territory of having digital conveniences in our radios.

73

-Jim
NU0C

On Tue, 04 Jun 2013 00:00:55 -0000, aa5wg wrote:

>Hi to the group,
>
>Today, with the TR7 connected to a Drake 50 ohm dummy load, I noticed two new noises on 40 meters. These noises are still present when the antenna is connected.
>
>There is a noticeable cw note on 7.0545 and 7.199 USB with Pass Band not turned on.
>
>There is a loud kinda computer clock counter noise on 7.1785, 7.248 and 7.3085 with the Pass Band not turned on.
>
>Any ideas how to fix these noises?
>
>Thank you,
>
>Chuck

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.

TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14144. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 11:33:45 UTC
From: Steve Wedge
Topic: 14123 Message: 14144

I've done lots of organizing and selling for spouses of SK's. it means a lot to the families most of the time.

Best deal I've picked up at a fest was at Hosstraders about 15 years ago when I scored a pristine, working NC-300 for $15.

How I got back into Drakes was also due to a bargain - at the Shelby Hamfest in '07, IIRC. Bought a set of A Twins for $100 - including AC-4 and MS-4. Used them for a while before selling them to get B's. yeah, they needed work, but were not in bad shape.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jun 4, 2013, at 12:45 AM, Joe - W7RKN <w7rkn.7@...> wrote:

> I have been lucky. I have picked up things just by being in the right place
> at the right time. Saw an ad in our local ham clubs' newsletter, about a
> widow of an SK that needed help cleaning out her husband's shack. I found
> out several weeks later that no one had responded so I volunteered to go up
> and help out. I was the only one to show up. Took half a day..the guy was
> an 'old school' Extra..had a parts department in his shack, that when loaded
> into the back of my full sized pickup, filled half of it! He had at least
> 300 pounds of homebrew yagi's and verticals. Also had 2 SB-200's (Both
> pristine)and an unbuilt SB-220, both with beau-coup, NOS tubes, still in
> boxes. (The 3-500z's were still packed in sawdust!) He also had several
> unbuilt Cantena's as well as a partially built IM-28 VTVM (I finished it
> first thing..works great..even had an RF Probe that hadn't been assembled
> yet!), and a Heath scope with no label. I think it is an IO-17. He had 2
> Kenwood TS-820(S)' [the models with the digi readout!], that looked as if
> they had just come off a dealer's display shelf, and in an unopened box, a
> brand new PalStar AT2K tuner. Long story short, After all was loaded, I
> asked her how she want me to handle selling everything, ie: best price,
> posted price, or what? She looked at me and said, "Oh no, I am **GIVING**
> this too you. I don't want any of it." I asked her if she was sure, and
> she said yes. She is quite wealthy..lives in a 4 million dollar house on
> North Shore, Lake Tahoe. So, Because I went and no one else felt like
> helping out an old wider lady...I cleaned up. Both 820(S)'s work fine..in
> fact, I used one when my TS-2000 took a lightning hit and had to go to
> Doctor Clif to get repaired. The SB-220 is in my closet..someday I will
> build it...One SB-200 I donated to Navy MARS here, the other is on, sorta a
> permanent loan, to a very good friend of mine who can't afford many 'toys'..
>
> Heh...won't tell you how I acquired my 2nd L-4B...I think I told Garey at
> one time, but that's another story.
>

> Yes, I have been very lucky over the years....Everyone tells me I should try
> my hand at gambling, as I live in Reno...no thank you....I like to get
> things for my money! LOL.
>
> Joe - W7RKN
>
> ----- Original Message -----
> From: "Paul Kraemer" <elespe@...>
> Subject: Re: [DrakeRadio] Hamfest stories that make you cry
>
> > What saddens me is that so often some offspring on a mission barges in and
> > orders all that junk of dad's removed---NOW---so we can sell the house and
> > get the heck out of here back to OUR lives.
> > That is sad. I had offered to help a widow a few years back and working
> > from a list had offered a pretty fair price for everything plus a
> > comission
> > on what I sold. It was done deal but missy daughter (miss organization)
> > blew in from another state and beat down mom about needing to get that
> > crap
> > out of the house so as to not delay the listing process so they could move
> > mom to the senior home where she belonged.
> > Because of a severe winter storm I couldn't drop everything to travel
> > across
> > the state to pick it up and it went for junk, but it was gone immediately.
> > And I'll bet dollars to donuts missy ain't been back since to see mom in
> > her
> > new apartment where she stuck her---out of the way.
> > That's what raises my ire.
> > I know, I got three of them that won't be any different but I am not
> > giving
> > up what makes me happy so they will have an easy time when I am gone. Just
> > ain't gonna happen.
> > Paul K0UYA
> >
>
>

[Non-text portions of this message have been removed]

14145. Re: [DrakeRadio] TR7 - Loud cw note (birdie?) and computer clock noise.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 11:47:07 UTC
From: Chuck Pool
Topic: 14128 Message: 14145

Hi Jim,

Thank you for you information. These signals don't move my S-meter but can easily be heard. I will try your suggestions to help cure these noises.

Again, thank you.

Chuck

From: Jim Shorney <jshorney@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Tuesday, June 4, 2013 12:48 AM
Subject: Re: [DrakeRadio] TR7 - Loud cw note (birdie?) and computer clock noise.

Chuck,

I just went and checked mine. I'm hearing one at 7.054-ish that sounds loud, but doesn't move the S-Meter. Also hear the noise at 7.1785, but not as loud as the other. Signals at the other frequencies are either non-existant or so weak as to be questionable whether it is really there or not.

If yours are stronger than that, there may be a couple of things you can check. Strange 7-line problems are often cured by simply re-seating all of the plug-in boards, or cleaning the contacts and then re-seating. You will want to make sure that the copper grounding fingers attached to some of the boards are clean and making good contact with the frame when the board is inserted. The screws securing the card cage cover should be *snug*, but do not over-tighten or they will strip. Check all grounding screws throughout the radio by slightly loosening them and snugging them back up.

In the end, there may not be a lot that can be done. Signals of this type tend to go with the territory of having digital conveniences in our radios.

73

-Jim
NU0C

On Tue, 04 Jun 2013 00:00:55 -0000, aa5wg wrote:

>Hi to the group,
>
>Today, with the TR7 connected to a Drake 50 ohm dummy load, I noticed two new noises on 40 meters. These noises are still present when the antenna is connected.
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>There is a noticeable cw note on 7.0545 and 7.199 USB with Pass Band not turned on.
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>
>Any ideas how to fix these noises?
>
>Thank you,
>
>Chuck

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

14146. Something I Came Across...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 12:02:30 UTC
From: Eddy Swynar
Topic: 14146 Message: 14146

Hi Guys,

I see that this ad is still up & running on The Ontario Swap Shop listings at http://www.kwarc.org/swapshop/searchfs.html

Not a bad source of parts for BOTH receiver & transmitter, in case you're interested (the Canadian market for such things just does not seem to be there):

Gaetan VE3AZQ [613-212-1365] in cornwall ON has listed the following (05-25-2013 07:46:54):

For Sale (last updated 05-25-2013, listed 04-04-2013)
Manufacturer: DRAKE
Model: R 4
Drake R4 receiver Parts.
Tubes set 30.00
Transfo 30.00
Meter 25.00
shipping extra
Many other parts avalaible.
For Sale (last updated 05-25-2013, listed 05-11-2013)
Manufacturer: DRAKE
Model: T-4X
Price: 75.00
Drake t-4X transmitter complete
Cosmetic a 7 on a 10 scale.
Was stored for 20 years so selling untested and as is.
Will probably need the paper capacitors to be replaces.

Shipping extra

The usual disclaimers apply, of course...

~73~ de Eddy VE3CUI - VE3XZ

[Non-text portions of this message have been removed]

14147. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 12:04:06 UTC
From: Geoffrey S. Mendelson
Topic: 14123 Message: 14147

On 06/04/2013 02:33 PM, Steve Wedge wrote:
> I've done lots of organizing and selling for spouses of SK's. it means a
> lot to the families most of the time.

I was watching a YouTube video of an older Kenwood rig, and someone in the comments noted that there were price tags on the side of everything, and wanted to know how to buy it.

The poster of the video responded that they were not for sale, the prices were for whomever liquidated the equipment after his death, so that they would have an idea of the value of each piece.

I guess it could also work for your advantage, if you for example labeled a TS-830 as $1000 and a Ten Tec Orion as $100, a thief would grab the 830 and ignore the Orion. :-)

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
It's Spring here in Jerusalem!!!

14148. Re: [DrakeRadio] Something I Came Across...

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 12:36:53 UTC
From: Steve Wedge
Topic: 14146 Message: 14148

I emailed him and he will ship to the US. I decided against buying due to the shipping expense, but if I really needed one of these parts, it's a good source.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 4, 2013, at 8:02 AM, Eddy Swynar <deswynar@xplornet.ca> wrote:

> Hi Guys,
>
> I see that this ad is still up & running on The Ontario Swap Shop listings at http://www.kwarc.org/swapshop/searchfs.html
>
> Not a bad source of parts for BOTH receiver & transmitter, in case you're interested (the Canadian market for such things just does not seem to be there):
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> Model: R 4
> Drake R4 receiver Parts.
> Tubes set 30.00
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> Meter 25.00
> shipping extra
> Many other parts avalaible.
> For Sale (last updated 05-25-2013, listed 05-11-2013)
> Manufacturer: DRAKE
> Model: T-4X
> Price: 75.00
> Drake t-4X transmitter complete
> Cosmetic a 7 on a 10 scale.
> Was stored for 20 years so selling untested and as is.
> Will probably need the paper capacitors to be replaces.
>
> Shipping extra
>
> The usual disclaimers apply, of course...
>
> ~73~ de Eddy VE3CUI - VE3XZ
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

14149. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 14:14:14 UTC
From: Joe - W7RKN
Topic: 14123 Message: 14149

You have thiefs in Israel? <<GRIN>>

Joe - W7RKN

----- Original Message -----
From: "Geoffrey S. Mendelson" <geoffreymendelson@...>
Subject: Re: [DrakeRadio] Hamfest stories that make you cry

> I guess it could also work for your advantage, if you for example
> labeled a TS-830 as $1000 and a Ten Tec Orion as $100, a thief would
> grab the 830 and ignore the Orion. :-)
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
> It's Spring here in Jerusalem!!!

14150. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 14:59:08 UTC
From: Jim Lowman
Topic: 14123 Message: 14150

It's been more that ten years since I've been to one of the local swapmeets. I stopped going because it was mostly computer stuff and walkie-talkies for sale. This, despite the fact that there was a purely computer-oriented swapmeet that was held three out of four weeks at various venues in the LA area.

I didn't even venture into the fleamarket area at Dayton this year, mainly because it was my first time there and I wanted to concentrate on the commercial exhibits. That, and the usual periodic rain showers.

73 de Jim - AD6CW

On 6/3/2013 10:01 PM, Doug wrote:
> Other than new product deals at the hamfests local to Indy, I have never found one reasonable deal on used gear. Amplifiers are always almost non existent and the used radios are always way over priced junk. I quit going years ago unless there's a new product I want to buy.
>
>

14151. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 15:04:44 UTC
From: Ian Wilson
Topic: 14123 Message: 14151

Hi Jim,

The Chino Hills swapmeet (3rd Saturday) often has some interesting
ham stuff. You need to get there early of course :)

73, ian K3IMW

On Tue, Jun 4, 2013 at 7:59 AM, Jim Lowman <jmlowman@...> wrote:

> **
>
>
> It's been more that ten years since I've been to one of the local
> swapmeets. I stopped going because it was mostly computer stuff and
> walkie-talkies for sale. This, despite the fact that there was a purely
> computer-oriented swapmeet that was held three out of four weeks at
> various venues in the LA area.
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> I didn't even venture into the fleamarket area at Dayton this year,
> mainly because it was my first time there and I wanted to concentrate on
> the commercial exhibits. That, and the usual periodic rain showers.
>
> 73 de Jim - AD6CW
>
>
> On 6/3/2013 10:01 PM, Doug wrote:
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> found one reasonable deal on used gear. Amplifiers are always almost non
> existent and the used radios are always way over priced junk. I quit going
> years ago unless there's a new product I want to buy.
> >
> >
>
>
>

[Non-text portions of this message have been removed]

14152. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 16:11:07 UTC
From: Steve Wedge
Topic: 14123 Message: 14152

The problem with that approach is that the pricing can become outdated, depending on how long the tags have been on.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jun 4, 2013, at 8:04 AM, "Geoffrey S. Mendelson" <geoffreymendelson@gmail.com> wrote:

> On 06/04/2013 02:33 PM, Steve Wedge wrote:
> > I've done lots of organizing and selling for spouses of SK's. it means a
> > lot to the families most of the time.
>
> I was watching a YouTube video of an older Kenwood rig, and someone in
> the comments noted that there were price tags on the side of everything,
> and wanted to know how to buy it.
>
> The poster of the video responded that they were not for sale, the
> prices were for whomever liquidated the equipment after his death, so
> that they would have an idea of the value of each piece.
>
> I guess it could also work for your advantage, if you for example
> labeled a TS-830 as $1000 and a Ten Tec Orion as $100, a thief would
> grab the 830 and ignore the Orion. :-)
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, N3OWJ/4X1GM/KBUH7245/KBUW5379
> It's Spring here in Jerusalem!!!
>

[Non-text portions of this message have been removed]

14153. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 16:20:41 UTC
From: Dan Galligan
Topic: 14123 Message: 14153

I will second what Ian said. While it is ALWAYS more about computers and trinkets, at the Chino Hills Electronics Swap Meet, most months there are several decent deals, on Ham, and commercial, radios, that can easily be converted to ham bands, to be had there.
Heck in the past year, or so, I sold a bunch of "excess to my needs" shack stuff there. Two and a half years ago, I bought my very nice L4-B there, with an N.O.S. set of 3-500ZG's, for $712. Don't ask how it was $712, it's a long story. But, it came from the estate of a ham, who had to go in a facility, as his Alzheimer's Disease had progressed to the point, of him no longer being self-functional. And, the money was to help pay his wife's expenses, for his care. Then there is the nice couple, who sells the connectors, power supplies and coax, they run a good business, and their products are what you would buy in the stores, but at reduced prices.
I've been buying and selling, there, since 2007. There have been some frustratingly "bad months" where you can't find a ham radio, in the bunch, but they are, contrary to the belief of many, fairly rare.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 4, 2013, at 8:04, Ian Wilson <ianmwilson73@...> wrote:

> Hi Jim,
>
> The Chino Hills swapmeet (3rd Saturday) often has some interesting
> ham stuff. You need to get there early of course :)
>
> 73, ian K3IMW
>
>
>
> On Tue, Jun 4, 2013 at 7:59 AM, Jim Lowman <jmlowman@...> wrote:
>
>> **
>>
>>
>> It's been more that ten years since I've been to one of the local
>> swapmeets. I stopped going because it was mostly computer stuff and

>> walkie-talkies for sale. This, despite the fact that there was a purely
>> computer-oriented swapmeet that was held three out of four weeks at
>> various venues in the LA area.
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>> I didn't even venture into the fleamarket area at Dayton this year,
>> mainly because it was my first time there and I wanted to concentrate on
>> the commercial exhibits. That, and the usual periodic rain showers.
>>
>> 73 de Jim - AD6CW
>>
>>
>> On 6/3/2013 10:01 PM, Doug wrote:
>>> Other than new product deals at the hamfests local to Indy, I have never
>> found one reasonable deal on used gear. Amplifiers are always almost non
>> existent and the used radios are always way over priced junk. I quit going
>> years ago unless there's a new product I want to buy.
>
>
> [Non-text portions of this message have been removed]
>
>
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> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

14154. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 16:53:45 UTC
From: Chris Musselman
Topic: 14123 Message: 14154

I have a good guess... A veteran/stubborn bargainer and an equally stubborn seller kept going past the $25 difference. Was that it? (-:

73-

Chris W6ATV

On 6/4/2013 9:20 AM, Dan Galligan wrote:
>I bought my very nice L4-B there,
> with an N.O.S. set of 3-500ZG's, for $712. Don't ask how it was $712,
> it's a long story.

14155. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 17:31:32 UTC
From: Dan Galligan
Topic: 14123 Message: 14155

Actually his asking price was $750, and I wanted to pay that price, but went there broke, and had only sold $712 worth of stuff, by the time I was ready to leave, and the guy, who was selling right next to me, and knew I had interest in the L4-B, had been firm at $750. He asked how much I had, and I counted out the $712, and change, he said he'd take that. I hoped for taking home the $12, plus change, but he wasn't cutting any more of a break. Because I knew where the money was going, it wasn't difficult to go home, as broke as I went, since I had a very nice condition L4-B.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 4, 2013, at 9:53, Chris Musselman <junkmailbox@...> wrote:

> I have a good guess... A veteran/stubborn bargainer and an equally
> stubborn seller kept going past the $25 difference. Was that it? (-:
>
> 73-
>
> Chris W6ATV
>
> On 6/4/2013 9:20 AM, Dan Galligan wrote:
>> I bought my very nice L4-B there,
>> with an N.O.S. set of 3-500ZG's, for $712. Don't ask how it was $712,
>> it's a long story.
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

14156. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 19:31:36 UTC
From: Jim Lowman
Topic: 14123 Message: 14156

Thanks, Ian. I have some friends who go to the Chino Hills Swap. I think it's the only game in town close to me, other than to go to TRW.

73 de Jim - AD6CW

On 6/4/2013 11:04 AM, Ian Wilson wrote:
> Hi Jim,
>
> The Chino Hills swapmeet (3rd Saturday) often has some interesting
> ham stuff. You need to get there early of course :)
>
> 73, ian K3IMW
>
>
>
>

14157. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 19:38:17 UTC
From: Dan Galligan
Topic: 14123 Message: 14157

Jim,
I have never been to the one at Cable Airport, but I understand that they do have one, periodically, there, too.
And, there is the once a year swap meet, sponsored by the SoCal Antique Radio Society, at Fullerton Airport. For more info, call Scott Ford, at Ford Electronics in Buena Park, or check out:
http://www.antiqueradios.org/
Or:
http://events.pe.com/fullerton_ca/events/show/282976085-southern-california-antique-radio-society-swap-meet
Most of their stuff, is broadcast listening radios, but there are a goodly amount of hams who go there, too.

73,
Dan
W3RXO/W6
Pomona, CA
DM14cb

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 4, 2013, at 12:31, Jim Lowman <jmlowman@...> wrote:

> Thanks, Ian. I have some friends who go to the Chino Hills Swap. I
> think it's the only game in town close to me, other than to go to TRW.
>
> 73 de Jim - AD6CW
>
> On 6/4/2013 11:04 AM, Ian Wilson wrote:
>> Hi Jim,
>>
>> The Chino Hills swapmeet (3rd Saturday) often has some interesting
>> ham stuff. You need to get there early of course :)
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>> 73, ian K3IMW
>>
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>
> Yahoo! Groups Links
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>

[Non-text portions of this message have been removed]

14158. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 20:23:43 UTC
From: Joe - W7RKN
Topic: 14123 Message: 14158

Cable Airport.....on Foothill, right...Claremont. That's where I learned to fly...well..got my 1st (of many) power rating, bought my first airplane there too...a 1952 Luscombe T8F 2 seater....I learned to fly..sailplanes, down at Paris, on the (then) edge of Lake Elsinore, when I was 14. The field got flooded, so the whole sailplane operation was moved up to Hemet.

Talk about a flood of memories.

Joe - W7RKN

----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
Subject: Re: [DrakeRadio] Hamfest stories that make you cry

> Jim,
> I have never been to the one at Cable Airport, but I understand that they
> do have one, periodically, there, too.

14159. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 20:27:53 UTC
From: Dan Galligan
Topic: 14123 Message: 14159

Joe,
You know, it sure is nice to ruminate, and reminisce, openly, like this, without getting our wings clipped, like some other lists tend to do.
What a great, eclectic group of folks, that we have here, who all have something in common (Drakes, in particular, boatanchors, in general)!!!

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

Sent from my iPad.

On Jun 4, 2013, at 13:23, Joe - W7RKN <w7rkn.7@...> wrote:

> Cable Airport.....on Foothill, right...Claremont. That's where I learned to
> fly...well..got my 1st (of many) power rating, bought my first airplane
> there too...a 1952 Luscombe T8F 2 seater....I learned to fly..sailplanes,
> down at Paris, on the (then) edge of Lake Elsinore, when I was 14. The
> field got flooded, so the whole sailplane operation was moved up to Hemet.
>
> Talk about a flood of memories.
>
> Joe - W7RKN
>
> ----- Original Message -----
> From: "Dan Galligan" <w3rxo@...>
> Subject: Re: [DrakeRadio] Hamfest stories that make you cry
>
>
>> Jim,
>> I have never been to the one at Cable Airport, but I understand that they
>> do have one, periodically, there, too.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>

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[Non-text portions of this message have been removed]

14160. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 21:04:06 UTC
From: vacuuminded2@...
Topic: 14123 Message: 14160

And those of us who aren't old enough to reminisce, thoroughly enjoy hearing the stories too. Well, at least the weird ones like me!

Chris

Sent from my outdated iPhone wireless thingy

On Jun 4, 2013, at 3:27 PM, Dan Galligan <w3rxo@...> wrote:

> Joe,
> You know, it sure is nice to ruminate, and reminisce, openly, like this, without getting our wings clipped, like some other lists tend to do.
> What a great, eclectic group of folks, that we have here, who all have something in common (Drakes, in particular, boatanchors, in general)!!!
>
> 73,
> Dan
> W3RXO/W6
> Evening Shade, OK
> EM25no
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
> As well as, classic old, vacuum tube ham radios.
>
> Sent from my iPad.
>
> On Jun 4, 2013, at 13:23, Joe - W7RKN <w7rkn.7@...> wrote:
>
> > Cable Airport.....on Foothill, right...Claremont. That's where I learned to
> > fly...well..got my 1st (of many) power rating, bought my first airplane
> > there too...a 1952 Luscombe T8F 2 seater....I learned to fly..sailplanes,
> > down at Paris, on the (then) edge of Lake Elsinore, when I was 14. The
> > field got flooded, so the whole sailplane operation was moved up to Hemet.
> >
> > Talk about a flood of memories.
> >
> > Joe - W7RKN
> >
> > ----- Original Message -----
> > From: "Dan Galligan" <w3rxo@...>
> > Subject: Re: [DrakeRadio] Hamfest stories that make you cry
> >
> >
> >> Jim,

> >> I have never been to the one at Cable Airport, but I understand that they
> >> do have one, periodically, there, too.
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> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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14161. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 21:40:17 UTC
From: Joe - W7RKN
Topic: 14123 Message: 14161

Can...don't get me going on my Drakes...

(Oh wait...we are all Drake aficionados here....)

,<GRIN>>

Joe - W7RKN
----- Original Message -----
From: "Dan Galligan" <w3rxo@...>
Subject: Re: [DrakeRadio] Hamfest stories that make you cry

> What a great, eclectic group of folks, that we have here, who all have
> something in common (Drakes, in particular, boatanchors, in general)!!!

14162. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:25:16 UTC
From: Steve Wedge
Topic: 14029 Message: 14162

I tend to think in fragments...

Were these tubes tested on a transconductance tube tester?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Howard Traxler
Sent: Wednesday, May 29, 2013 5:21 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Another chapter in the *life* of my TR-4

Garey,
No real progress with the TR-4, but I thought I'd let you know:
A friend came over with his tube tester and tested the tubes in my TR-4. There were five tubes that woren't on the chart in his tester
6ej7
6ea8
13de7
6gx6
and 6ev7
So those didn't get tested. The rest of the tubes were in the questionable range.

The most questionable one was the ob2. Under test, it displayed a purple glow and some visible and audable arching and measured 15 of 100 percent . So now I think I'm looking for someone with a newer (or older) tube tester.

It would sure be nice to have this thing off my bench. If I could get anything for it, I'd just sell it as is and let someone else worry about making it work. it's getting a bit frustrating.

73.
Howard, WA9RYF

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14163. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:23:08 UTC
From: Steve Wedge
Topic: 14029 Message: 14163

Best test for 0A2 is to measure the voltage at the output, while in-circuit.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Howard Traxler
Sent: Wednesday, May 29, 2013 5:21 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Another chapter in the *life* of my TR-4

Garey,
No real progress with the TR-4, but I thought I'd let you know:
A friend came over with his tube tester and tested the tubes in my TR-4. There were five tubes that woren't on the chart in his tester
6ej7
6ea8
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6gx6
and 6ev7
So those didn't get tested. The rest of the tubes were in the questionable range.

The most questionable one was the ob2. Under test, it displayed a purple glow and some visible and audable arching and measured 15 of 100 percent . So now I think I'm looking for someone with a newer (or older) tube tester.

It would sure be nice to have this thing off my bench. If I could get anything for it, I'd just sell it as is and let someone else worry about making it work. it's getting a bit frustrating.

73.
Howard, WA9RYF

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[Non-text portions of this message have been removed]

14164. 2-B muting fix

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 05:08:19 UTC
From: Ethan Blanton
Topic: 14164 Message: 14164

Hi all,

I recently acquired a Drake 2-B and it had a weak muting circuit --
after the radio warmed up, the standby switch wouldn't mute the radio.
I spent some time getting to know the bias supply and muting circuits,
and eventually fixed the problem. I have documented it here:

http://kb8ojh.net/projects/2-b-muting/

The TL;DR is that I refreshed the bias circuit (including checking
R48, the RECV SENS pot, which many have fingered as a likely culprit
in the past) and replaced the paper caps in that area, which didn't
fix the problem, and swapped a few tubes. Ultimately it turned out to
be V2, a 6U8 in the first mixer. Apparently it had enough leakage
from the grid to cathode once it warmed up to drag down the ~20 Meg
impedance bias supply.

I found a few emails from several years ago on this list tackling a
similar problem, and one gentleman mentioned that there's a likely
tube culprit, but he didn't remember which one. I don't know if this
was the same tube, but it did the trick for me.

Ethan

14165. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 22:51:16 UTC
From: Richard Knoppow
Topic: 14029 Message: 14165

----- Original Message -----
From: "Howard Traxler" <howard@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, May 29, 2013 2:21 PM
Subject: [DrakeRadio] Another chapter in the *life* of my
TR-4

> Garey,
> No real progress with the TR-4, but I thought I'd let you
> know:
> A friend came over with his tube tester and tested the
> tubes in my TR-4. There were five tubes that woren't on
> the chart in his tester
> 6ej7
> 6ea8
> 13de7
> 6gx6
> and 6ev7
> So those didn't get tested. The rest of the tubes were in
> the questionable range.
>
> The most questionable one was the ob2. Under test, it
> displayed a purple glow and some visible and audable
> arching and measured 15 of 100 percent . So now I think
> I'm looking for someone with a newer (or older) tube
> tester.
>
> It would sure be nice to have this thing off my bench. If
> I could get anything for it, I'd just sell it as is and
> let someone else worry about making it work. it's getting
> a bit frustrating.
>
> 73.
> Howard, WA9RYF

There are updates for some testers on the web, its
worth looking at BAMA and similar sources and doing a Google
search. Perhaps the widest range of tubes is tested by the
TV-7 series of military testers. The OB2 is supposed to
glow purple but its definitely not supposed to arc. This is
a 105 Volt gas regulator tube.

--
Richard Knoppow
Los Angeles
WB6KBL

dickburk@...

14166. Re: [DrakeRadio] Another chapter in the *life* of my TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-05-29 23:07:01 UTC
From: Doug
Topic: 14029 Message: 14166

Howard,

Contact me off list if you're serious about selling the rig.

Doug - N9XTF

Sent from my iPhone

On May 29, 2013, at 17:21, "Howard Traxler" <howard@...> wrote:

> Garey,
> No real progress with the TR-4, but I thought I'd let you know:
> A friend came over with his tube tester and tested the tubes in my TR-4. There were five tubes that woren't on the chart in his tester
> 6ej7
> 6ea8
> 13de7
> 6gx6
> and 6ev7
> So those didn't get tested. The rest of the tubes were in the questionable range.
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> The most questionable one was the ob2. Under test, it displayed a purple glow and some visible and audable arching and measured 15 of 100 percent . So now I think I'm looking for someone with a newer (or older) tube tester.
>
> It would sure be nice to have this thing off my bench. If I could get anything for it, I'd just sell it as is and let someone else worry about making it work. it's getting a bit frustrating.
>
> 73.
> Howard, WA9RYF
>
> [Non-text portions of this message have been removed]
>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

14167. Re: [DrakeRadio] Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-04 03:25:45 UTC
From: Charles Ahlgren
Topic: 14123 Message: 14167

Interesting stories, but I have to ask about the $30: are you sure he was
telling you the truth and it wasn't more like $300??

No offense intended...

73's de Charles, KW6G (formerly - WB6IYM)
http://wb6iym.googlepages.com/coffeemugnet

On Mon, Jun 3, 2013 at 8:16 PM, Paul Kraemer <elespe@lisco.com> wrote:

> **
>
>
> What saddens me is that so often some offspring on a mission barges in and
> orders all that junk of dad's removed---NOW---so we can sell the house and
> get the heck out of here back to OUR lives.
> That is sad. I had offered to help a widow a few years back and working
> from a list had offered a pretty fair price for everything plus a
> comission
> on what I sold. It was done deal but missy daughter (miss organization)
> blew in from another state and beat down mom about needing to get that
> crap
> out of the house so as to not delay the listing process so they could move
> mom to the senior home where she belonged.
> Because of a severe winter storm I couldn't drop everything to travel
> across
> the state to pick it up and it went for junk, but it was gone immediately.
> And I'll bet dollars to donuts missy ain't been back since to see mom in
> her
> new apartment where she stuck her---out of the way.
> That's what raises my ire.
> I know, I got three of them that won't be any different but I am not
> giving
> up what makes me happy so they will have an easy time when I am gone. Just
> ain't gonna happen.
> Paul K0UYA
>
> ----- Original Message -----
> From: "AA8W" <aa8w@...>
> To: <DrakeRadio@yahoogroups.com>
> Cc: "Chris Farley" <vacuuminded2@...>
> Sent: Monday, June 03, 2013 8:59 PM
> Subject: Re: [DrakeRadio] Hamfest stories that make you cry
>
> > The other side of that is a widow may have lost out.
> > When a friend on the other side of the state passed away some eight

> > years ago his wife mentioned after the funeral that she was going to
> > take his gear to a local ham-fest. I asked her to wait a while as my
> > wife couldn't make it to the funeral and we would come back in a few
> > weeks for a visit. While the girls were visiting I went to the garage
> > where she said her daughter had staged his equipment. She had actually
> > done a pretty good job of getting things in proper boxes. I got it all
> > together and made an excel spread sheet indicating what accessory's went
> > with what. (Some moduals for a transceiver hadn't been installed.)
> > Then listed fair market values I thought she could get. It came to
> > $6000. A local ham came by looked at the spread sheet and agreed and
> > gave her $4000 on the spot. So he made a few bucks and she had no
> > hassle. I hope someone does that for my wife.
> > 73,
> > Mike AA8W
> >
> >
> > On 6/3/2013 5:28 PM, Chris Farley wrote:
> >>
> >> We've all seen or heard about things that happen at hamfest that make
> >> us laugh, cringe, bawl, weep, or fall over on the floor in sheer
> >> pain. My personal topper happened this last Sunday at the Princeton,
> >> IL hamfest.
> >>
> >> I drove the hour long trek with two fellow ham passengers in the old
> >> Chevy, and arrived at the fairgrounds about 7:30AM. We parked the car
> >> in a nice high traffic spot, as I had some junk to peddle out of my
> >> trunk. I made a quick round, found a nice big piece of Air-Dux in the
> >> box for $5, and emptied the contents of my trunk on the grass. I
> >> commenced to wander around in search of some more treasures I can't
> >> live without, by this time it was past 8 and the building with
> >> commercial vendors was open to the generous public. I wandered
> >> inside, and spotted a table with anchor-type schtuff. All right, some
> >> real radios! I promptly asked about the Henry 2K, Drake twins on the
> >> floor, and Hallicrafters S-20R also on the floor. I immediately
> >> bought the Halli for the asking price of $5, the gentleman to my left
> >> without skipping a beat interrupted and asked about the Tail Twister
> >> rotator and two control boxes sitting next to it, and promptly
> >> purchased for
> >> the asking price of $25. The Drake twins had been sold, and we had a
> >> lengthy conversation about the Henry 2K, and my hesitation due to the
> >> "unobtanium" 8873 tubes it uses.
> >>
> >> After reluctantly and graciously passing on the Henry, (he wasn't
> >> crazy on the price but it wasn't _quite_ a give-away..), I crouched
> >> down to pick up my bargain S-20R. Against my better judgement, I took
> >> a closer look at the Drakes. There was a TX-4B, R-4B, MS-4 speaker
> >> and AC-4 power supply. They were in quite remarkable condition aside
> >> from some dust, and the receiver was chock full of band crystals.
> >>
> >> Against my better judgement, I said "Out of curiousity, may I ask what

> >> you got for the Drakes?"
> >>
> >> "$30."
> >>
> >> Yes.
> >>
> >> Thirty flipping US Dollars. For the whole set.
> >>
> >> I literally put my hand on the floor to keep from falling over, my jaw
> >> following suit.
> >>
> >> That is the closest I have _ever_ been to being that jerkwad who says,
> >> "No, you didn't. Here- Here's $200, NOW they're sold." It took a lot
> >> of willpower to get back on my feet, and walk away with that measly
> >> little Halliscratchers after that..
> >>
> >> A word of advise...
> >> If you buy something at a hamfest for such a RIDICULOUS price you
> >> can't quite believe it yourself, do yourself and everybody else a
> >> favor. Pay the man, pick it up, and RUN. Do NOT leave it sitting
> >> there for an hour or more. You'll either make a bunch of people sick
> >> to their stomachs, or some so-and-so will find a way to buy it out
> >> from under you.
> >>
> >> This one will be at the top of the list for many, many years I believe.
> >>
> >> Regards,
> >> Chris kc9ieq
> >>
> >
> >
> >
> > [Non-text portions of this message have been removed]
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> > Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14168. Re: [DrakeRadio] Side Tone Mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-03 00:57:31 UTC
From: Charles Ahlgren
Topic: 14113 Message: 14168

I had this problem with the T4X - not T4C; is that what you meant? I got the fix from Drake 30 years ago...It seems it was a problem with the very early models of the T4X; for which I have one....

Hope that helps...

73's de Charles, KW6G (formerly - WB6IYM)
http://wb6iym.googlepages.com/coffeemugnet

On Sat, Jun 1, 2013 at 1:06 AM, Richard Knoppow <1oldlens1@....com>wrote:

> **
>
>
> I may have found my own answer. I read through the
> "Drakemod" document in Garey's CD. The mod is mentioned
> there as a way to eliminate feedthrough of the CW side tone
> in standby mainly on the T-4C. I don't have this problem on
> my T-4XB so, unless its for something else, I will just
> leave it alone.
> BTW, if you have the CD make sure to read _everything_
> in it. There is a lot of hidden wisdom that you will miss if
> you just look at the instruction books and service manual.
> If you don't have the CD _get it_!!!
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>

[Non-text portions of this message have been removed]

14169. Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 04:01:50 UTC
From: Jim Shorney
Topic: 14169 Message: 14169

Who can spot the Drake in this month's LARC newsletter?

http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14170. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 04:14:15 UTC
From: VE3AX/7
Topic: 14169 Message: 14170

Too easy – Drake TR-7 or TR-7A and CW-75 or SP-75 in the GOTA article.

Peter
VE3AX/7

From: Jim Shorney
Sent: Tuesday, June 04, 2013 9:01 PM
To: drakeradio@yahoogroups.com
Subject: [DrakeRadio] Spot the Drake!

Who can spot the Drake in this month's LARC newsletter?

http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

[Non-text portions of this message have been removed]

14171. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 04:37:25 UTC
From: Jim Shorney
Topic: 14169 Message: 14171

Congrats, you are the first! You win ... absolutely nothing! :D

That was taken last year at Field Day. This pic was sent to the newsletter crew along with some others (including the shot of the Yagi under the moon and the photo inset with it) as a jest, I really didn't think they would use it. That's not really the GOTA station, that's the 20 Meter Fone position at K0KKV, connected to the aforementioned Yagi. The op is me. If you zoom in on the pic, they actually kept the resolution pretty decent in the publication. The rig is my "daily driver" TR-7. Photos were taken with my Nikon D5100. IIRC, the TR-7 photo was snapped by K0NEB with my camera.

The TR-7 has been asked to come back again this year. I've been told that if I behave I can come with it....

73

-Jim
NU0C

On Tue, 4 Jun 2013 21:14:15 -0700, VE3AX/7 wrote:

>Too easy â☐☐ Drake TR-7 or TR-7A and CW-75 or SP-75 in the GOTA article.
>
>Peter
>VE3AX/7
>
>From: Jim Shorney
>Sent: Tuesday, June 04, 2013 9:01 PM
>To: drakeradio@yahoogroups.com
>Subject: [DrakeRadio] Spot the Drake!
>
>
>
>Who can spot the Drake in this month's LARC newsletter?
>
>http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf
>
>73
>
>-Jim
>NU0C
>
>--
>Â☐ThereÂ☐s something out of place Â☐ letÂ☐s go and poke it with a stick.Â☐ Â☐ The Doctor, "AmyÂ☐s Choice"
>
>

>
>
>
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>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14172. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 04:49:19 UTC
From: VE3AX/7
Topic: 14169 Message: 14172

OK I win nothing...but it was still fun!

Maybe we should come up with some more challenging pics to see how the masses do?

So was it a CW-75 or SP-75? – hard to tell from the tiny pic. I'll assume it was NOT a P-75!

I have a few Drake relics around here that might challenge our readers!

73

Peter
VE3AX/7

From: Jim Shorney
Sent: Tuesday, June 04, 2013 9:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Spot the Drake!

Congrats, you are the first! You win ... absolutely nothing! :D

That was taken last year at Field Day. This pic was sent to the newsletter crew along with some others (including the shot of the Yagi under the moon and the photo inset with it) as a jest, I really didn't think they would use it. That's not really the GOTA station, that's the 20 Meter Fone position at K0KKV, connected to the aforementioned Yagi. The op is me. If you zoom in on the pic, they actually kept the resolution pretty decent in the publication. The rig is my "daily driver" TR-7. Photos were taken with my Nikon D5100. IIRC, the TR-7 photo was snapped by K0NEB with my camera.

The TR-7 has been asked to come back again this year. I've been told that if I behave I can come with it....

73

-Jim
NU0C

On Tue, 4 Jun 2013 21:14:15 -0700, VE3AX/7 wrote:

>Too easy â☐☐ Drake TR-7 or TR-7A and CW-75 or SP-75 in the GOTA article.
>
>Peter
>VE3AX/7
>
>From: Jim Shorney
>Sent: Tuesday, June 04, 2013 9:01 PM
>To: mailto:drakeradio%40yahoogroups.com

>Subject: [DrakeRadio] Spot the Drake!
>
>
>
>Who can spot the Drake in this month's LARC newsletter?
>
>http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf
>
>73
>
>-Jim
>NU0C
>
>--
>Â□ThereÂ□s something out of place Â□ letÂ□s go and poke it with a stick.Â□ Â□ The Doctor, "AmyÂ□s Choice"
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--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

[Non-text portions of this message have been removed]

14173. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 04:59:52 UTC
From: Jim Shorney
Topic: 14169 Message: 14173

Oops, yeah, that's an SP-75. I wish I could FIND my P-75 now that I have figured out how to convert phone patches into computer sound card interfaces...

What you don't see is the Telex Echelon ANR 150 aircraft headset, with active noice cancellation. That's another fun toy. It's neat to watch people's eyes when they put the headset on and turn on the ANR and they suddenly can't hear the generator noise anymore!

73

-Jim
NU0C

On Tue, 4 Jun 2013 21:49:19 -0700, VE3AX/7 wrote:

>OK I win nothing...but it was still fun!
>
>Maybe we should come up with some more challenging pics to see how the masses do?
>
>So was it a CW-75 or SP-75? â☐☐ hard to tell from the tiny pic. Iâ☐☐ll assume it was NOT a P-75!
>
>I have a few Drake relics around here that might challenge our readers!
>
>73
>
>Peter
>VE3AX/7
>
>From: Jim Shorney
>Sent: Tuesday, June 04, 2013 9:37 PM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Spot the Drake!
>
>
>
>Congrats, you are the first! You win ... absolutely nothing! :D
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>That was taken last year at Field Day. This pic was sent to the newsletter crew
>along with some others (including the shot of the Yagi under the moon and the
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>not really the GOTA station, that's the 20 Meter Fone position at K0KKV,
>connected to the aforementioned Yagi. The op is me. If you zoom in on the pic,
>they actually kept the resolution pretty decent in the publication. The rig is
>my "daily driver" TR-7. Photos were taken with my Nikon D5100. IIRC, the TR-7
>photo was snapped by K0NEB with my camera.

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>The TR-7 has been asked to come back again this year. I've been told that if I
>behave I can come with it....
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>On Tue, 4 Jun 2013 21:14:15 -0700, VE3AX/7 wrote:
>
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>>
>>Peter
>>VE3AX/7
>>
>>From: Jim Shorney
>>Sent: Tuesday, June 04, 2013 9:01 PM
>>To: mailto:drakeradio%40yahoogroups.com
>>Subject: [DrakeRadio] Spot the Drake!
>>
>>
>>
>>Who can spot the Drake in this month's LARC newsletter?
>>
>>http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf
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>>-Jim
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>>[Non-text portions of this message have been removed]
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>--
>Ham Radio NU0C
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>TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

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>"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
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14174. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 06:16:12 UTC
From: VE3AX/7
Topic: 14169 Message: 14174

Jim:

I had a chance to play with a set of Bose noise cancelling headsets at the Minneapolis airport when we got held up last January on the way back from Naples FL. Not sure now what model these were but they were ridiculously expensive - maybe $1,000?. Not the Quiet Comfort 3's or 15's which any Best Buy carries around $300-$400, but man they were unbelievable! Just the ticket for a shack full of 8877 VHF amps with too noisy blowers! Can't seem to find them on the Bose web site. Found my dream guitars in a display in the same airport – McPherson's – Wow! I'd have to sell my IC-7800.

OK, back to Drake – does anyone have any info on a 4-line style monitorscope? Lee Craner (on here) has done a gorgeous job on a 7-line style scope he made using a TR-7 chassis and a Heath SB-614. That's the only one I have ever seen other than the "Drake HO-10" I have here. I did not make it but did improve it, and will continue to do so. The puzzling part is the front panel, which appears to be done "at the factory". It's not the kind of painting just anyone could do. It looks just like the Drakes. It is a Heath HO-10 built into a Drake TC-2 cabinet. Would love to know if someone at the Drake factory had this thing made up. Already asked Bill years ago but he knew nothing about it. I found it in the back of a station wagon at Dayton moments before the fleamarket opened, maybe 8 years ago. Happened to come across a guy who offered me a fleamarket ticket at half price at 7 am that morning! Glad I bought it!

I thought of throwing a pic out there to see if anyone could "ID the Drake" but thought it a bit unfair!

73

Peter
VE3AX/7

From: Jim Shorney
Sent: Tuesday, June 04, 2013 9:59 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Spot the Drake!

Oops, yeah, that's an SP-75. I wish I could FIND my P-75 now that I have figured out how to convert phone patches into computer sound card interfaces...

What you don't see is the Telex Echelon ANR 150 aircraft headset, with active noice cancellation. That's another fun toy. It's neat to watch people's eyes when they put the headset on and turn on the ANR and they suddenly can't hear the generator noise anymore!

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-Jim
NU0C

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>So was it a CW-75 or SP-75? â□□ hard to tell from the tiny pic. Iâ□□ll assume it was NOT a P-75!
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>Sent: Tuesday, June 04, 2013 9:37 PM
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>not really the GOTA station, that's the 20 Meter Fone position at K0KKV,
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>they actually kept the resolution pretty decent in the publication. The rig is
>my "daily driver" TR-7. Photos were taken with my Nikon D5100. IIRC, the TR-7
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>>Subject: [DrakeRadio] Spot the Drake!
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[Non-text portions of this message have been removed]

14175. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 11:01:02 UTC
From: Doug
Topic: 14169 Message: 14175

On a slightly different topic, did anyone see the movie Madison with Jim Caviezel? The movie was based on Madison Indiana in the '70s and the Mrs. Madison race team. There was a Drake on board the old crew chief's fishing boat.

Doug - N9XTF

Sent from my iPhone

On Jun 5, 2013, at 2:16, "VE3AX/7" <ve3ax@...> wrote:

> Jim:
>
> I had a chance to play with a set of Bose noise cancelling headsets at the Minneapolis airport when we got held up last January on the way back from Naples FL. Not sure now what model these were but they were ridiculously expensive - maybe $1,000?. Not the Quiet Comfort 3's or 15's which any Best Buy carries around $300-$400, but man they were unbelievable! Just the ticket for a shack full of 8877 VHF amps with too noisy blowers! Can't seem to find them on the Bose web site. Found my dream guitars in a display in the same airport – McPherson's – Wow! I'd have to sell my IC-7800.
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> From: Jim Shorney
> Sent: Tuesday, June 04, 2013 9:59 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Spot the Drake!
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> >>[Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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http://www.pdswireless.com

[Non-text portions of this message have been removed]

14176. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 12:26:53 UTC
From: GALE STEWARD
Topic: 14169 Message: 14176

Speaking of spotting Drakes. About two weeks ago I was doing some work in the radio room and had the TV turned on. It was on TCM and they were showing the 60's movie "Our Man Flint" which was a bit of a spoof on the James Bond movies. I happened to we watching when there was a scene where a female radio officer was trying to contact the movie's hero. It looked like a Drake TR-3 on the desk, complete with a Vibroplex bug that she used to "send" the message.

73, Stew K3ND

From: VE3AX/7 <ve3ax@...>
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, June 5, 2013 12:14 AM
Subject: Re: [DrakeRadio] Spot the Drake!

Too easy – Drake TR-7 or TR-7A and CW-75 or SP-75 in the GOTA article.

Peter
VE3AX/7

From: Jim Shorney
Sent: Tuesday, June 04, 2013 9:01 PM
To: drakeradio@yahoogroups.com
Subject: [DrakeRadio] Spot the Drake!

Who can spot the Drake in this month's LARC newsletter?

http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf

73

-Jim
NU0C

--
Theres something out of place lets go and poke it with a stick. The Doctor, "Amys Choice"

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14177. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 13:44:24 UTC
From: Garey Barrell
Topic: 14169 Message: 14177

That's no challenge!! TR-7 (NOT 'A'), SP-75, and PS-7(early version).

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
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> http://k0kkv.org/wp-content/uploads/downloads/2013/06/2013_06_log.pdf
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14178. TR-3, LSB Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 13:00:59 UTC
From: rjbart1@bellsouth.net
Topic: 14178 Message: 14178

I was visiting my mom in Ct last week and saw my senior TR-3 on the shelve in the basement, loved this radio. It developed a problem when ever I tried to go from USB to LSB frequencies. It was almost like that function suddenly stopped working. The radio would not load up, the receive signals were gone, worked OK on all of the USB bands. For the longest time I thought it was the crystal related to the LSB function. Instead of fixing it I just put it on the shelve. I am hoping to ship it to my current QTH, get it fixed, get a refurb PS, and use it with a good attic antenna. Anyone have any ideas on the repair?? Robert B, K1YFE

14179. Re: Hamfest stories that make you cry

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:07:51 UTC
From: hglent
Topic: 14123 Message: 14179

Yep! I agree!

PK
WA0BAG

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> Joe,
> You know, it sure is nice to ruminate, and reminisce, openly, like this, without getting our wings clipped, like some other lists tend to do.
> What a great, eclectic group of folks, that we have here, who all have something in common (Drakes, in particular, boatanchors, in general)!!!
>
> 73,
> Dan
> W3RXO/W6
> Evening Shade, OK
> EM25no
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
> As well as, classic old, vacuum tube ham radios.
>
> Sent from my iPad.
>
> On Jun 4, 2013, at 13:23, Joe - W7RKN <w7rkn.7@...> wrote:
>
> > Cable Airport.....on Foothill, right...Claremont. That's where I learned to
> > fly...well..got my 1st (of many) power rating, bought my first airplane
> > there too...a 1952 Luscombe T8F 2 seater....I learned to fly..sailplanes,
> > down at Paris, on the (then) edge of Lake Elsinore, when I was 14. The
> > field got flooded, so the whole sailplane operation was moved up to Hemet.
> >
> > Talk about a flood of memories.
> >
> > Joe - W7RKN
> >
> > ----- Original Message -----
> > From: "Dan Galligan" <w3rxo@...>
> > Subject: Re: [DrakeRadio] Hamfest stories that make you cry
> >
> >
> >> Jim,
> >> I have never been to the one at Cable Airport, but I understand that they

> >> do have one, periodically, there, too.
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
>

14180. r4c agc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:21:07 UTC
From: yash@aol.com
Topic: 14180 Message: 14180

Been cleaning up a r4c that I just bought. I noticed the AGC problem. when in slow ,all seems ok, when in med or fast I get like a fast pumping ,in the audio with the s meter needle showing the same. signal get hard to understand. Just got the CD for the c-line . anybody point me in the right direction?
thanks
dale wt4t

[Non-text portions of this message have been removed]

14181. Re: [DrakeRadio] r4c agc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:31:05 UTC
From: Garey Barrell
Topic: 14180 Message: 14181

Dale -

That's why you have SLOW AGC!. FAST and/or MED are if you _want_ to hear between code elements (QSK), or AM or some data modes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
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> thanks
> dale wt4t
>
>
>

14182. Re: [DrakeRadio] r4c agc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:42:49 UTC
From: yash@aol.com
Topic: 14180 Message: 14182

Garey
I just never noticed this on the A or B line on ssb. I need to print the r4c manual today and do some reading ,answer some of my own questions. Also had the main knob off to see why their was no adjustment with the shirt to match the calibration tone. the rig had, once the main knob removed , then the skirt, then behind the shirt a gray plastic like bushing, seemed loose on the inter shaft and hard as a rock. what should it be , plyable? Is ther a detail on the cd for the assembly.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Wed, Jun 5, 2013 10:31 am
Subject: Re: [DrakeRadio] r4c agc

Dale -

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yash@... wrote:
> Been cleaning up a r4c that I just bought. I noticed the AGC problem. when in slow ,all seems ok, when in med or fast I get like a fast pumping ,in the audio with the s meter needle showing the same. signal get hard to understand. Just got the CD for the c-line . anybody point me in the right direction?
> thanks
> dale wt4t
>
>
>

[Non-text portions of this message have been removed]

14183. Re: [DrakeRadio] r4c agc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:43:00 UTC
From: Paul Christensen
Topic: 14180 Message: 14183

Dale,

See this information on the WB4HFN website:

http://www.wb4hfn.com/DRAKE/DrakeArticles/TechTips/R4_AGC_Modification.htm

Paul, W9AC

----- Original Message -----
From: yash@...
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, June 05, 2013 10:21 AM
Subject: [DrakeRadio] r4c agc

Been cleaning up a r4c that I just bought. I noticed the AGC problem. when in slow ,all seems ok, when in med or fast I get like a fast pumping ,in the audio with the s meter needle showing the same. signal get hard to understand. Just got the CD for the c-line . anybody point me in the right direction?
thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14184. Re: [DrakeRadio] r4c agc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 14:47:16 UTC
From: Paul Christensen
Topic: 14180 Message: 14184

Another option is Sherwood's adjustable AGC kit. I have it on my R-4C and it allows for several different switched AGC settings that vary between very slow and fast pumping. I believe Sherwood's fastest setting is the stock "fast" R/C combination.

Paul, W9AC

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, June 05, 2013 10:31 AM
Subject: Re: [DrakeRadio] r4c agc

Dale -

That's why you have SLOW AGC!. FAST and/or MED are if you _want_ to hear between code elements (QSK), or AM or some data modes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Been cleaning up a r4c that I just bought. I noticed the AGC problem. when in slow ,all seems ok, when in med or fast I get like a fast pumping ,in the audio with the s meter needle showing the same. signal get hard to understand. Just got the CD for the c-line . anybody point me in the right direction?
> thanks
> dale wt4t
>
>
>

[Non-text portions of this message have been removed]

14185. r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 21:33:16 UTC
From: yash@aol.com
Topic: 14185 Message: 14185

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

[Non-text portions of this message have been removed]

14186. Re: [DrakeRadio] r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 21:49:33 UTC
From: William Houghton
Topic: 14185 Message: 14186

Dale,

Garey is the best reference on this. I seem to recall that he once told me to sand the ends of that grey bushing. Yes, it is a hard material. I think I taped a short piece of sandpaper, maybe 100 grit (or was it 220 ?) to a piece of plexiglas and slid the bushing across the sandpaper. This will help to keep your sanding square. You just want to rough it up and remove the glaze as I recall. Again, Garey knows best.

73,

Bill

From: "yash@..." <yash@...>
To: DrakeRadio@yahoogroups.com
Sent: Wed, June 5, 2013 2:33:21 PM
Subject: [DrakeRadio] r4c main tuning.

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14187. RE: [DrakeRadio] r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 22:48:43 UTC
From: keith evans
Topic: 14185 Message: 14187

Hi Dale,

You will find that you need to push the knob against the Grey Tubing, before you tighten the screws,

If too tight, then you will find the adjustment will not work, If to loose, then the dial will slip.

You after a few attempts, you will soon get it right.

If the bushing has gone a little solid, then you may well have to rough up the ends as Gary says.

73

Keith G3VKW

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: 05 June 2013 22:50
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] r4c main tuning.

Dale,

Garey is the best reference on this. I seem to recall that he once told me to sand the ends of that grey bushing. Yes, it is a hard material. I think I taped a short piece of sandpaper, maybe 100 grit (or was it 220 ?) to a piece of plexiglas and slid the bushing across the sandpaper. This will help to keep your sanding square. You just want to rough it up and remove the glaze as I recall. Again, Garey knows best.

73,

Bill

From: "yash@... <mailto:yash%40aol.com> " <yash@aol.com <mailto:yash%40aol.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Wed, June 5, 2013 2:33:21 PM
Subject: [DrakeRadio] r4c main tuning.

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on

the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

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[Non-text portions of this message have been removed]

14188. Re: [DrakeRadio] r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 00:20:32 UTC
From: yash@aol.com
Topic: 14185 Message: 14188

Keith
will give it a try. I think the bushing is a bit out of square also, will play with it and see what happens
dale wt4t

-----Original Message-----
From: keith evans <g3vkw@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Wed, Jun 5, 2013 6:49 pm
Subject: RE: [DrakeRadio] r4c main tuning.

Hi Dale,

You will find that you need to push the knob against the Grey Tubing, before you tighten the screws,

If too tight, then you will find the adjustment will not work, If to loose, then the dial will slip.

You after a few attempts, you will soon get it right.

If the bushing has gone a little solid, then you may well have to rough up the ends as Gary says.

73

Keith G3VKW

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: 05 June 2013 22:50
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] r4c main tuning.

Dale,

Garey is the best reference on this. I seem to recall that he once told me to sand the ends of that grey bushing. Yes, it is a hard material. I think I taped a short piece of sandpaper, maybe 100 grit (or was it 220 ?) to a piece of plexiglas and slid the bushing across the sandpaper. This will help to keep your sanding square. You just want to rough it up and remove the glaze as I recall. Again, Garey knows best.

73,

Bill

From: "yash@... <mailto:yash%40aol.com>; " <yash@... <mailto:yash%40aol.com>; >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>;
Sent: Wed, June 5, 2013 2:33:21 PM
Subject: [DrakeRadio] r4c main tuning.

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

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[Non-text portions of this message have been removed]

14189. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 04:22:54 UTC
From: Jim Shorney
Topic: 14169 Message: 14189

OK, so how do you know that it's an early PS-7? I would think it's a later version, as it has the printed circuit board for the rear panel switches, etc., instead of point-to-point wiring. See:

http://www.dl7maj.de/PS7-Inrush.pdf

Yeah, more of my pictures... :D

73

-Jim
NU0C

On Wed, 05 Jun 2013 09:44:24 -0400, Garey Barrell wrote:

>That's no challenge!! TR-7 (NOT 'A'), SP-75, and PS-7(early version).

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14190. Re: [DrakeRadio] r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 11:58:09 UTC
From: Steve Wedge
Topic: 14185 Message: 14190

There have been a fair number of posts about this issue, and I have an R-4C with a very sticky one myself. You can use 3/8" automotive hose (there have been posts on this before but you'll have to mine them from the yahoo page) or you can buy one ready-made for $2 here: http://www.2bradioparts.com/page27.html

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: keith evans
Sent: Wednesday, June 05, 2013 6:48 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] r4c main tuning.

Hi Dale,

You will find that you need to push the knob against the Grey Tubing, before you tighten the screws,

If too tight, then you will find the adjustment will not work, If to loose, then the dial will slip.

You after a few attempts, you will soon get it right.

If the bushing has gone a little solid, then you may well have to rough up the ends as Gary says.

73

Keith G3VKW

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: 05 June 2013 22:50
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] r4c main tuning.

Dale,

Garey is the best reference on this. I seem to recall that he once told me to sand the ends of that grey bushing. Yes, it is a hard material. I think I taped a short piece of sandpaper, maybe 100 grit (or was it 220 ?) to a piece of plexiglas and slid the bushing across the sandpaper. This will help to keep your sanding square. You just want to rough it up and remove the glaze as I recall. Again, Garey knows best.

73,

Bill

From: "yash@... <mailto:yash%40aol.com> " <yash@aol.com <mailto:yash%40aol.com> >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>
Sent: Wed, June 5, 2013 2:33:21 PM
Subject: [DrakeRadio] r4c main tuning.

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

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[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14191. Re: [DrakeRadio] r4c main tuning.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 14:14:57 UTC
From: yash@aol.com
Topic: 14185 Message: 14191

Steve and keith
thanks for the info,decided to order a sleve 2b radio parts.
thanks
dale wt4t

-----Original Message-----
From: Steve Wedge <w1es1982@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Thu, Jun 6, 2013 7:58 am
Subject: Re: [DrakeRadio] r4c main tuning.

There have been a fair number of posts about this issue, and I have an R-4C with a very sticky one myself. You can use 3/8" automotive hose (there have been posts on this before but you'll have to mine them from the yahoo page) or you can buy one ready-made for $2 here: http://www.2bradioparts.com/page27.html

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: keith evans
Sent: Wednesday, June 05, 2013 6:48 PM
To: DrakeRadio@yahoogroups.com
Subject: RE: [DrakeRadio] r4c main tuning.

Hi Dale,

You will find that you need to push the knob against the Grey Tubing, before you tighten the screws,

If too tight, then you will find the adjustment will not work, If to loose, then the dial will slip.

You after a few attempts, you will soon get it right.

If the bushing has gone a little solid, then you may well have to rough up the ends as Gary says.

73

Keith G3VKW

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of William Houghton
Sent: 05 June 2013 22:50
To: DrakeRadio@yahoogroups.com

Subject: Re: [DrakeRadio] r4c main tuning.

Dale,

Garey is the best reference on this. I seem to recall that he once told me to sand the ends of that grey bushing. Yes, it is a hard material. I think I taped a short piece of sandpaper, maybe 100 grit (or was it 220 ?) to a piece of plexiglas and slid the bushing across the sandpaper. This will help to keep your sanding square. You just want to rough it up and remove the glaze as I recall. Again, Garey knows best.

73,

Bill

From: "yash@... <mailto:yash%40aol.com>; " <yash@... <mailto:yash%40aol.com>; >
To: DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>;
Sent: Wed, June 5, 2013 2:33:21 PM
Subject: [DrakeRadio] r4c main tuning.

Went thru the whole cd on the c-line ,could find nothing, on my problem. Drake says to zero beat the calibrator then hold the main knob and turn the skirt till everything is in alignment. My r4c skirt won't turn the dial for the fine adjustment. I pulled the knob,the skirt and behind the shirt there is a gray plastic bushing that fits the outer shaft on the tuning assembly. that's all that is there. one end of the gray bushing push's up against the harp clip on the vfo shaft. and the other end must rub against the backside of the skirt? Is there some parts missing? should the bushing be tight on the vfo shaft? Is the bushing hard or like a piece if rubber. I can see it will be rather easy to fab something if necessary to make it work correctly. If there is a write up or picture of the assembly ,please let me know where.

thanks
dale wt4t

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14192. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 14:16:06 UTC
From: Garey Barrell
Topic: 14169 Message: 14192

Jim -

Just checking to see if anyone was paying attention! :-) No way to tell from the front..... There WERE at least three versions, the
latest one had the Zener and resistor sensor for the overvoltage SCR on the PC board. I believe 2 and 3 both had the rear panel PC board.

I for one appreciate your pictures. Always sharpand specific. thanks!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> OK, so how do you know that it's an early PS-7? I would think it's a later
> version, as it has the printed circuit board for the rear panel switches, etc.,
> instead of point-to-point wiring. See:
>
> http://www.dl7maj.de/PS7-Inrush.pdf
>
> Yeah, more of my pictures... :D
>
> 73
>
> -Jim
> NU0C
>
>
> On Wed, 05 Jun 2013 09:44:24 -0400, Garey Barrell wrote:
>
>> That's no challenge!! TR-7 (NOT 'A'), SP-75, and PS-7(early version).
> --
> ?There?s something out of place ? let?s go and poke it with a stick.? ? The Doctor,
"Amy?s Choice"
>
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> Yahoo! Groups Links
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14193. FS: Unique Drake Service Supplement CDs

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 19:29:41 UTC
From: Garey Barrell
Topic: 993 Message: 14193

Here is the information that Drake left out of their manuals!

Unique supplemental service information CDs available for the Drake A, B and C Lines, 2-B, 2-C / 2-NT, TR-4, and TR-4C/Cw/CwRIT.

High resolution color photos of the under chassis and individual PC boards of each unit, with all parts identified and keyed to a parts list
make it easy to locate any component. No more trying to trace wires through bundles, etc. This information is not available elsewhere and
really makes a difference in servicing these units.

These CDs are NOT just scans of the original manuals that were included with the equipment when new. High resolution scans of the original
manuals ARE on the CDs, along with scans of manuals for associated equipment such as the C-4, FS-4, MN2000, L-4B, W-4, etc.

Samples of these pages (at reduced resolution) and purchase information are at <www.k4oah.com>.

--
73, Garey - K4OAH
Glen Allen, VA

14194. not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 20:41:32 UTC
From: milton_valerio
Topic: 14194 Message: 14194

gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
any idea where to start?

14195. Re: [DrakeRadio] not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 20:50:52 UTC
From: Garey Barrell
Topic: 14194 Message: 14195

Milton -

By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?

Has this unit ever worked _to your knowledge_?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

milton_valerio wrote:
> gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
> any idea where to start?
>

14196. Re: [DrakeRadio] not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 21:28:47 UTC
From: <w7apm@...>
Topic: 14194 Message: 14196

Milton,

power tubes are all beaten up but at least they should put 20W

That statement may be where the error lies. The tubes may be VERY dead. If so they won't draw any idling current or put out any power.

Marty

KL7AM

--- milton_valerio@yahoo.com wrote:
From: "milton_valerio" <milton_valerio@yahoo.com>
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] not transmitting tr4
Date: Thu, 06 Jun 2013 20:41:32 -0000

gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
any idea where to start?

14197. Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-06 22:48:04 UTC
From: milton_valerio
Topic: 14194 Message: 14197

Exactly, one can hear the relay close but no matter the position of the bias control it wont move, I tested the tubes and compared their emission against a brand new RCA from a T4X and they are slightly lower than it, so there is my assumption that at least 20w are reasonable to expect but in my experience usually is a bit more.
I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Milton -
>
> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
>
> Has this unit ever worked _to your knowledge_?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
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> milton_valerio wrote:
> > gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
> > any idea where to start?
> >
>

14198. Re: [DrakeRadio] Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 01:30:31 UTC
From: Garey Barrell
Topic: 14194 Message: 14198

OK ...

Check the voltage on the Cathodes of the PA tubes, both in standby and in TUNE. Make sure the SIDEBAND switch is in the '-X' position.

What is the serial number of the unit??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Milton -
>>
>> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
>>
>> Has this unit ever worked _to your knowledge_?
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> milton_valerio wrote:
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>>> any idea where to start?
>>>

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> ------------------------------------
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> Yahoo! Groups Links
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14199. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 02:13:18 UTC
From: Jim Shorney
Topic: 14169 Message: 14199

Hi Garey,

IOW, you were messing with me! :D

I'll have to check when I pull the system out for Field Day, I don't recall noticing where the Zener and resistor are.

Thanks for the comments on my photos, I appreciate that. My Nikon is always teaching me new tricks.

73

-Jim
NU0C

On Thu, 06 Jun 2013 10:16:06 -0400, Garey Barrell wrote:

>Jim -
>
>Just checking to see if anyone was paying attention! :-) No way to tell from the front..... There WERE at least three versions, the
>latest one had the Zener and resistor sensor for the overvoltage SCR on the PC board. I believe 2 and 3 both had the rear panel PC board.
>
>I for one appreciate your pictures. Always sharpand specific. thanks!
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> OK, so how do you know that it's an early PS-7? I would think it's a later
>> version, as it has the printed circuit board for the rear panel switches, etc.,
>> instead of point-to-point wiring. See:
>>
>> http://www.dl7maj.de/PS7-Inrush.pdf
>>
>> Yeah, more of my pictures... :D
>>
>> 73
>>
>> -Jim
>> NU0C

>>
>>
>> On Wed, 05 Jun 2013 09:44:24 -0400, Garey Barrell wrote:
>>
>>> That's no challenge!! TR-7 (NOT 'A'), SP-75, and PS-7(early version).
>> --
>> ☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"
>>
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>> ---
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>> Yahoo! Groups Links
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>
>Yahoo! Groups Links
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>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14200. Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 02:38:33 UTC
From: milton_valerio
Topic: 14194 Message: 14200

Serial is 26324, Lookin closely at the sideband switch noted that one contact was bent making no contact, so I gently pulled it back into position and cleaned all switches with a Qtip and car wax, now I get 100 watt in 40 mts, but the S meter wont zero and read backwards..

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> OK ...
>
> Check the voltage on the Cathodes of the PA tubes, both in standby and in TUNE. Make sure the SIDEBAND switch is in the '-X' position.
>
> What is the serial number of the unit??
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> > Exactly, one can hear the relay close but no matter the position of the bias control it wont move, I tested the tubes and compared their emission against a brand new RCA from a T4X and they are slightly lower than it, so there is my assumption that at least 20w are reasonable to expect but in my experience usually is a bit more.
> > I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> Milton -
> >>
> >> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
> >>
> >> Has this unit ever worked _to your knowledge_?
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
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> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
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> >> milton_valerio wrote:

> >>> gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
> >>> any idea where to start?
> >>>
> >
> >
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> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
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>

14201. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 07:24:49 UTC
From: William Houghton
Topic: 13832 Message: 14201

Garey,

What I was calling a cam is what you call a follower. I have since discovered that while the PTO holds calibration across the band bumping the chassis changes the freq. The amount of jump depends on the strength of the bump. Of course I found this by accidentally bumping the rig. I'm wondering if that disc in the back has too much wear. Bummer. I have checked ground connections, added the grounding strap for the follower, etc.

Now if I had a lathe I could make a new bushing for the coil end out of something like teflon.

_____
From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, May 24, 2013 6:34:49 AM
Subject: Re: [DrakeRadio] my latest TR-4

Hi Bill -

Proud of you!! I'm not sure I follow the 'cam' you are referring to. The 'follower', which is the 'fork' threaded onto the lead screw, IS threaded, but it is a very loose fit. The spring from the top of the fork to the hole in the top corner of the shield can is what keeps tension on it. Drake later added a short piece of shield braidsoldered to the fork and to the side wall of the gearbox to ensure a solid ground for the lead screw/ferrite. Originally the ground was through the ball bearings and through the fork sliding along the guide bar at the top of the gearbox. This should NOT be lubricated.

Yes, the phenolic 'plug' at the rear of the slug is what keepsit stable within the coil. It should be a sliding fit, and the plug should be arranged so that it's in a diamond shape rather than a square. This minimizes the surface contact between the two pieces. Also not lubricated.

Always good to bring one back from the brink!!! Congratulations.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> I have the PTO working well. The point of the bend in the slug shaft was right
> at the threads. I was able to straighten then a little. The movable metal
"cam"
> that is driven by the leadscrew seems to have a lot of play. The cam on mine
>did
> not have threads, it was just a hole. It seems that the little plastic disk in
> the back of the coil is what holds the slug into alignment. The PTO seems to
> hold calibration well across the full 600kHz of the PTO.
>
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tue, May 21, 2013 6:55:38 AM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Bill -
>
> That's typical of a TR-4 with 'used' finals. Output power of 'new'
> finals reaches these levels in a year or so, depending upon brand,
> etc. ..... However, once they get to this level they tend to last a
> LOT longer with reasonable care.
>
> The relative values of those cathode resistors is more important than
> the absolute value. If you're tired of working on it, add some Ohmite
> OX ceramic composition resistors, or if you can find 'good' 2W carbon
> comps, and have them on hand for the next time you're in the mood!!
> :-) Metal or carbon 'film' resistors are not a good choice, as they
> don't care for current surges like these see.
>
> Congratulations!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> William Houghton wrote:
>> Hi Garey,
>>
>> After alignment I now get:
>>
>> 80m: 160W at both ends

>> 40m: 140W to 160W
>> 20m: 150W to 160W
>> 15m: 120W to 130W
>> 10m: 130W to 140W
>>
>> with the somewhat high cathode resistors giving slightly more negative
> feedback
>> than intended. Not knowing the age of the finals I am pleased with these
>> results.
>>
>>
>> 73,
>>
>> Bill
>>
>>
>>
>>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Mon, May 20, 2013 12:32:11 PM
>> Subject: Re: [DrakeRadio] my latest TR-4
>>
>>
>> Bill -
>>
>> OK, that's not bad. Fully aligned with new PA tubes, you should see
>> about 200W on 80-20M, 175W on 15M and 150W on 10M.
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>> The Cathode resistors eat into your power somewhat. They need to be
>> close to 15 ohms, ideally within 5% of each other. They're there to
>> equalize the current through the three tubes. If the voltage across
>> one resistor goes up, the Cathode voltage goes up, which makes the
>> Grid slightly more negative, which reduces the current throughthat tube.
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>> You'll probably be fine once you get the alignment done. Good luck!
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>>> I measured the output on the ends of the various bands into a dummy load.
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>>> getting 150W to 160W at some ends. In all cases there is a noticable drop
> from
>>> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
>>> 4.0MHz. I'll have a better feel for it after I align it.
>>>
>>> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how much
>>> that affects the output power.
>>>
>>> Now to try to bend the PTO's brass tuning rod straight unless someone has a
>>> working TR-4 PTO available -hihi.
>>>

[Non-text portions of this message have been removed]

14202. TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 11:31:52 UTC
From: aa5wg
Topic: 14202 Message: 14202

Can anyone duplicate this loud digital clock noise on your TR-7?

Setup:

TR-7 connected to 50 ohm dummy load
PBT = Off
Wide SSB filter selected = BW buttons out or not depressed position
AGC = Fast
RIT = off

Mode Switch Position:

1. AM = 5339.7 MHz = S6 digital clock noise
2. RTTY = 5342.1 MHz = S7 digital clock noise
3. CW = 5336.9 MHz = S2 digital clock noise and 5338.9 S2 digital clock noise (double hump)
4. LSB = 5341.1 = digital S6 clock noise
5. USB = 5336.3 = digital S5 clock noise

Thank you,

Chuck

14203. Re: [DrakeRadio] Spot the Drake!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 14:21:00 UTC
From: Garey Barrell
Topic: 14169 Message: 14203

Gotta keep you on your toes....! (Itmakes it much harder to chase someone...

I still have my Nikon F(Photomic), (50 years) and bought my Nikon 990 digital when they came out in 2000. Just think, a real 3.3 Mpixel
digital camera for only $1000, NO discounts. :-) But it's been worth every bit of it, and IS a Nikon. The thing that looked the screwiest,
(the rotating 'head',) has proved to be the neatest feature, especially as I get older and less (no, UNABLE) to get down on a knee for a low
angle shot. I can hold it down by my knees like a reflex camera if I want to, or way over my head, and still see the viewfinder. Genius!!
:-) Some day I'll work all the way through the 100+ page manual to learn more of the stuff it does!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
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> IOW, you were messing with me! :D
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> I'll have to check when I pull the system out for Field Day, I don't recall
> noticing where the Zener and resistor are.
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> Thanks for the comments on my photos, I appreciate that. My Nikon is always
> teaching me new tricks.
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> 73
>
> -Jim
> NU0C
>
> On Thu, 06 Jun 2013 10:16:06 -0400, Garey Barrell wrote:
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>> I for one appreciate your pictures. Always sharpand specific. thanks!

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>>> http://www.dl7maj.de/PS7-Inrush.pdf
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>>> Yeah, more of my pictures... :D
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>>> 73
>>>
>>> -Jim
>>> NU0C
>>>
>>>
>>> On Wed, 05 Jun 2013 09:44:24 -0400, Garey Barrell wrote:
>>>
>>>> That's no challenge!! TR-7 (NOT 'A'), SP-75, and PS-7(early version).
>>> --
>>> ?There?s something out of place ? let?s go and poke it with a stick.? ? The Doctor,
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>>>
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>>> Yahoo! Groups Links
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>>
>> Yahoo! Groups Links
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> --

> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
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>
> Yahoo! Groups Links
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14204. Re: [DrakeRadio] Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 14:26:53 UTC
From: Garey Barrell
Topic: 14194 Message: 14204

So now you are able to set the idle current??

The S-Meter is likely a tube problem, possibly V17. Check Cathode resistor R92 for value, DC voltage on Cathode, and condition of C135.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

milton_valerio wrote:
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>>> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
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>>>>> any idea where to start?
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>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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14205. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 14:38:03 UTC
From: Garey Barrell
Topic: 13832 Message: 14205

Bill -

Is the spring from the follower to the shield can stretched out?It puts a fairly firm hold onthe follower and the slug. Are the brass rod
and rear bearing CLEAN and unlubed? Is the shield can locked with all four 'tangs' engaged? Yes, if you smack it, it will change a few 10's
of Hz, favorite trick is to raise the front feet off the desk an inch or two and dropit. It may change, but only slightly, not enoughto
make an SSB signal unintelligible. Remember, this was designed for MOBILE use, so can't be too touchy.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> Garey,
>
> What I was calling a cam is what you call a follower. I have since discovered
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> found this by accidentally bumping the rig. I'm wondering if that disc in the
> back has too much wear. Bummer. I have checked ground connections, added the
> grounding strap for the follower, etc.
>
>
> Now if I had a lathe I could make a new bushing for the coil end out of
> something like teflon.
>
>
>
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> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, May 24, 2013 6:34:49 AM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Hi Bill -
>
> Proud of you!! I'm not sure I follow the 'cam' you are referring to.
> The 'follower', which is the 'fork' threaded onto the lead screw, IS
> threaded, but it is a very loose fit. The spring from the top of the

> fork to the hole in the top corner of the shield can is what keeps
> tension on it. Drake later added a short piece of shield
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> Also not lubricated.
>
> Always good to bring one back from the brink!!! Congratulations.
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> not have threads, it was just a hole. It seems that the little plastic disk in
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>>
>>
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>> Subject: Re: [DrakeRadio] my latest TR-4
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>> Bill -
>>
>> That's typical of a TR-4 with 'used' finals. Output power of 'new'
>> finals reaches these levels in a year or so, depending upon brand,
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>> LOT longer with reasonable care.
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>> The relative values of those cathode resistors is more important than
>> the absolute value. If you're tired of working on it, add some Ohmite
>> OX ceramic composition resistors, or if you can find 'good' 2W carbon
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>> 80m: 160W at both ends
>>> 40m: 140W to 160W
>>> 20m: 150W to 160W
>>> 15m: 120W to 130W
>>> 10m: 130W to 140W
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>>> with the somewhat high cathode resistors giving slightly more negative
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>>> 73,
>>>
>>> Bill
>>>
>>>
>>>
>>>
>>> _____
>>> From: Garey Barrell <k4oah@...>
>>> To: DrakeRadio@yahoogroups.com
>>> Sent: Mon, May 20, 2013 12:32:11 PM
>>> Subject: Re: [DrakeRadio] my latest TR-4
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>>>
>>> Bill -

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>>> OK, that's not bad. Fully aligned with new PA tubes, you should see
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>>> The Cathode resistors eat into your power somewhat. They need to be
>>> close to 15 ohms, ideally within 5% of each other. They're there to
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>>>> that affects the output power.
>>>>
>>>> Now to try to bend the PTO's brass tuning rod straight unless someone has a
>>>> working TR-4 PTO available -hihi.
>>>>
>
>
>
> [Non-text portions of this message have been removed]
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> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

14206. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 14:47:51 UTC
From: Garey Barrell
Topic: 14202 Message: 14206

Chuck -

Yes, they are there, but they shouldn't move the S-Meter.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

aa5wg wrote:
> Can anyone duplicate this loud digital clock noise on your TR-7?
>
> Setup:
>
> TR-7 connected to 50 ohm dummy load
> PBT = Off
> Wide SSB filter selected = BW buttons out or not depressed position
> AGC = Fast
> RIT = off
>
> Mode Switch Position:
>
> 1. AM = 5339.7 MHz = S6 digital clock noise
> 2. RTTY = 5342.1 MHz = S7 digital clock noise
> 3. CW = 5336.9 MHz = S2 digital clock noise and 5338.9 S2 digital clock noise (double hump)
> 4. LSB = 5341.1 = digital S6 clock noise
> 5. USB = 5336.3 = digital S5 clock noise
>
> Thank you,
>
> Chuck
>

14207. WTB TR-7/TR-5 VFO Knob "Skirts"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 15:04:00 UTC
From: <w7apm@...>
Topic: 14207 Message: 14207

Anybody have any to spare? Buy or maybe trade?

Thanks!

Marty

KL7AM

14208. WTB TR-7 VFO Knob "Skirts"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 15:16:15 UTC
From: <w7apm@...>
Topic: 14208 Message: 14208

My last post may have been confusing as the whole subject didn't show
in the subject line when sent...

Anybody have any to spare? Buy or maybe trade?
Thanks!
Marty
KL7AM

--- w7apm@mtaonline.net wrote:
From: <w7apm@mtaonline.net>
To: <DrakeRadio@yahoogroups.com>
Subject: [DrakeRadio] WTB TR-7/TR-5 VFO Knob "Skirts"
Date: Fri, 7 Jun 2013 08:04:00 -0700

Anybody have any to spare? Buy or maybe trade?
Thanks!
Marty
KL7AM

14209. Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 15:35:03 UTC
From: milton_valerio
Topic: 14194 Message: 14209

Thats correct, now I have idle in both positions of the sideband switch and have an output of 100W in 40 mts but noted that the Smeter even with the control all the way turned wont zero, and also it reads backwards when receiving.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> So now you are able to set the idle current??
>
> The S-Meter is likely a tube problem, possibly V17. Check Cathode resistor R92 for value, DC voltage on Cathode, and condition of C135.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> milton_valerio wrote:
> > Serial is 26324, Lookin closely at the sideband switch noted that one contact was bent making no contact, so I gently pulled it back into position and cleaned all switches with a Qtip and car wax, now I get 100 watt in 40 mts, but the S meter wont zero and read backwards..
> >
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> OK ...
> >>
> >> Check the voltage on the Cathodes of the PA tubes, both in standby and in TUNE. Make sure the SIDEBAND switch is in the '-X' position.
> >>
> >> What is the serial number of the unit??
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> milton_valerio wrote:
> >>> Exactly, one can hear the relay close but no matter the position of the bias control it wont move, I tested the tubes and compared their emission against a brand new RCA from a T4X and they are slightly lower than it, so there is my assumption that at least 20w are

reasonable to expect but in my experience usually is a bit more.
> >>> I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> Milton -
> >>>>
> >>>> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
> >>>>
> >>>> Has this unit ever worked _to your knowledge_?
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> milton_valerio wrote:
> >>>>> gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
> >>>>> any idea where to start?
> >>>>>
> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> Yahoo! Groups Links
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> > > Yahoo! Groups Links
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14210. Re: [DrakeRadio] Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 15:53:43 UTC
From: Garey Barrell
Topic: 14194 Message: 14210

OK, check what I listed below.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

milton_valerio wrote:
> Thats correct, now I have idle in both positions of the sideband switch and have an output of 100W in 40 mts but noted that the Smeter even with the control all the way turned wont zero, and also it reads backwards when receiving.
>
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> So now you are able to set the idle current??
>>
>> The S-Meter is likely a tube problem, possibly V17. Check Cathode resistor R92 for value, DC voltage on Cathode, and condition of C135.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> milton_valerio wrote:
>>> Serial is 26324, Lookin closely at the sideband switch noted that one contact was bent making no contact, so I gently pulled it back into position and cleaned all switches with a Qtip and car wax, now I get 100 watt in 40 mts, but the S meter wont zero and read backwards..
>>>
>>>
>>>
>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>> OK ...
>>>>
>>>> Check the voltage on the Cathodes of the PA tubes, both in standby and in TUNE. Make sure the SIDEBAND switch is in the '-X' position.
>>>>
>>>> What is the serial number of the unit??
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA

>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> milton_valerio wrote:
>>>>> Exactly, one can hear the relay close but no matter the position of the bias control it wont move, I tested the tubes and compared their emission against a brand new RCA from a T4X and they are slightly lower than it, so there is my assumption that at least 20w are reasonable to expect but in my experience usually is a bit more.
>>>>> I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.
>>>>>
>>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
>>>>>> Milton -
>>>>>>
>>>>>> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
>>>>>>
>>>>>> Has this unit ever worked _to your knowledge_?
>>>>>>
>>>>>> 73, Garey - K4OAH
>>>>>> Glen Allen, VA
>>>>>>
>>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>>>> and TR-4/C Service Supplement CDs
>>>>>> <www.k4oah.com>
>>>>>>
>>>>>> milton_valerio wrote:
>>>>>>> gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
>>>>>>> any idea where to start?
>>>>>>>
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>>>>> Yahoo! Groups Links
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> Yahoo! Groups Links
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>

14211. looking for a t4xc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 18:14:13 UTC
From: yash@aol.com
Topic: 14211 Message: 14211

My t4xc purchase fell thru, so still looking for a T4XC transmitter. Will consider all. do not need supply.
please get back off list.
thanks
dale wt4t
239 283 2665

[Non-text portions of this message have been removed]

14212. Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 18:39:27 UTC
From: milton_valerio
Topic: 14194 Message: 14212

Problem solved, it was C135. thank you very much.

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> OK, check what I listed below.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> milton_valerio wrote:
> > Thats correct, now I have idle in both positions of the sideband switch and have an output of 100W in 40 mts but noted that the Smeter even with the control all the way turned wont zero, and also it reads backwards when receiving.
> >
> >
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >> So now you are able to set the idle current??
> >>
> >> The S-Meter is likely a tube problem, possibly V17. Check Cathode resistor R92 for value, DC voltage on Cathode, and condition of C135.
> >>
> >> 73, Garey - K4OAH
> >> Glen Allen, VA
> >>
> >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >> and TR-4/C Service Supplement CDs
> >> <www.k4oah.com>
> >>
> >> milton_valerio wrote:
> >>> Serial is 26324, Lookin closely at the sideband switch noted that one contact was bent making no contact, so I gently pulled it back into position and cleaned all switches with a Qtip and car wax, now I get 100 watt in 40 mts, but the S meter wont zero and read backwards..
> >>>
> >>>
> >>>
> >>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>> OK ...
> >>>>
> >>>> Check the voltage on the Cathodes of the PA tubes, both in standby and in TUNE. Make sure the SIDEBAND switch is in the '-X' position.

> >>>>
> >>>> What is the serial number of the unit??
> >>>>
> >>>> 73, Garey - K4OAH
> >>>> Glen Allen, VA
> >>>>
> >>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>> and TR-4/C Service Supplement CDs
> >>>> <www.k4oah.com>
> >>>>
> >>>> milton_valerio wrote:
> >>>>> Exactly, one can hear the relay close but no matter the position of the bias control it wont move, I tested the tubes and compared their emission against a brand new RCA from a T4X and they are slightly lower than it, so there is my assumption that at least 20w are reasonable to expect but in my experience usually is a bit more.
> >>>>> I got this unit as is and it was full of dust, if someday it worked that might be 20 years ago.
> >>>>>
> >>>>> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> >>>>>> Milton -
> >>>>>>
> >>>>>> By 'impossible to set' do you mean there is NO idle current as described for BIAS setting in manual?
> >>>>>>
> >>>>>> Has this unit ever worked _to your knowledge_?
> >>>>>>
> >>>>>> 73, Garey - K4OAH
> >>>>>> Glen Allen, VA
> >>>>>>
> >>>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> >>>>>> and TR-4/C Service Supplement CDs
> >>>>>> <www.k4oah.com>
> >>>>>>
> >>>>>> milton_valerio wrote:
> >>>>>>> gentlemen, I have a non transmitting TR4, already checked all the tubes and replaced 2, power tubes are all beaten up but at least they should put 20W, power supply is just recapped and voltages are within specs, relays activate when needed and receiver is clear and loud in all bands, cleaned all contacts and controls, impossible to set .1 in bias according to the manual, but if measured directly from the pin 2 in either final, -62 variable bias voltage is encountered.
> >>>>>>> any idea where to start?
> >>>>>>>
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> >>>>> Yahoo! Groups Links
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14213. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 18:42:18 UTC
From: William Houghton
Topic: 13832 Message: 14213

Hi Garey,

Yes, the spring is attached from the follower to the cam if that is what you mean. I did not clean the "bearing" end of the brass rod but it didn't look dirty. I did reglue the phenolic disc back into the coil. The can shield doesn't lock as firmly as the can on the PTO in my TR-3. On the TR-4, I can wiggle the can slightly with the largest gap between the can and the back of the gearbox being maybe 1/2 mm. That seems to cause a slight shift.

Tapping the chassis lightly with the plastic handle of a Craftsman screwdriver will produce a few 100Hz shift. A firm tap (but not real hard) will cause of shift of about 5 to 10kHz. The FSK pin connected to a freq counter via a 10X scope probe confirms that the PTO freq is shifting.

I have the allen head set screw adjusted just enough to eliminate the wobble in the tuning shaft and play in the dial disc. I was cautious about overtightening.

thanks,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, June 7, 2013 7:38:09 AM
Subject: Re: [DrakeRadio] my latest TR-4

Bill -

Is the spring from the follower to the shield can stretched out?It puts a fairly firm hold onthe follower and the slug. Are the brass rod

and rear bearing CLEAN and unlubed? Is the shield can locked with all four 'tangs' engaged? Yes, if you smack it, it will change a few 10's

of Hz, favorite trick is to raise the front feet off the desk an inch or two and dropit. It may change, but only slightly, not enoughto

make an SSB signal unintelligible. Remember, this was designed for MOBILE use, so can't be too touchy.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Garey,
>
> What I was calling a cam is what you call a follower. I have since discovered
> that while the PTO holds calibration across the band bumping the chassis
>changes
> the freq. The amount of jump depends on the strength of the bump. Of course I
> found this by accidentally bumping the rig. I'm wondering if that disc in the
> back has too much wear. Bummer. I have checked ground connections, added the
> grounding strap for the follower, etc.
>
>
> Now if I had a lathe I could make a new bushing for the coil end out of
> something like teflon.
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, May 24, 2013 6:34:49 AM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Hi Bill -
>
> Proud of you!! I'm not sure I follow the 'cam' you are referring to.
> The 'follower', which is the 'fork' threaded onto the lead screw, IS
> threaded, but it is a very loose fit. The spring from the top of the
> fork to the hole in the top corner of the shield can is what keeps
> tension on it. Drake later added a short piece of shield
> braidsoldered to the fork and to the side wall of the gearbox to
> ensure a solid ground for the lead screw/ferrite. Originally the
> ground was through the ball bearings and through the fork sliding
> along the guide bar at the top of the gearbox. This should NOT be
> lubricated.
>
> Yes, the phenolic 'plug' at the rear of the slug is what keepsit
> stable within the coil. It should be a sliding fit, and the plug
> should be arranged so that it's in a diamond shape rather than a
> square. This minimizes the surface contact between the two pieces.
> Also not lubricated.
>
> Always good to bring one back from the brink!!! Congratulations.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>

>
> William Houghton wrote:
>> Hi Garey,
>>
>> I have the PTO working well. The point of the bend in the slug shaft was
right
>> at the threads. I was able to straighten then a little. The movable metal
> "cam"
>> that is driven by the leadscrew seems to have a lot of play. The cam on mine
>> did
>> not have threads, it was just a hole. It seems that the little plastic disk
in
>> the back of the coil is what holds the slug into alignment. The PTO seems to
>> hold calibration well across the full 600kHz of the PTO.
>>
>>
>>
>>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Tue, May 21, 2013 6:55:38 AM
>> Subject: Re: [DrakeRadio] my latest TR-4
>>
>>
>> Bill -
>>
>> That's typical of a TR-4 with 'used' finals. Output power of 'new'
>> finals reaches these levels in a year or so, depending upon brand,
>> etc. ..... However, once they get to this level they tend to last a
>> LOT longer with reasonable care.
>>
>> The relative values of those cathode resistors is more important than
>> the absolute value. If you're tired of working on it, add some Ohmite
>> OX ceramic composition resistors, or if you can find 'good' 2W carbon
>> comps, and have them on hand for the next time you're in the mood!!
>> :-) Metal or carbon 'film' resistors are not a good choice, as they
>> don't care for current surges like these see.
>>
>> Congratulations!!
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> William Houghton wrote:
>>> Hi Garey,

>>>
>>> After alignment I now get:
>>>
>>> 80m: 160W at both ends
>>> 40m: 140W to 160W
>>> 20m: 150W to 160W
>>> 15m: 120W to 130W
>>> 10m: 130W to 140W
>>>
>>> with the somewhat high cathode resistors giving slightly more negative
>> feedback
>>> than intended. Not knowing the age of the finals I am pleased with these
>>> results.
>>>
>>>
>>> 73,
>>>
>>> Bill
>>>
>>>
>>>
>>>
>>> _____
>>> From: Garey Barrell <k4oah@...>
>>> To: DrakeRadio@yahoogroups.com
>>> Sent: Mon, May 20, 2013 12:32:11 PM
>>> Subject: Re: [DrakeRadio] my latest TR-4
>>>
>>>
>>> Bill -
>>>
>>> OK, that's not bad. Fully aligned with new PA tubes, you should see
>>> about 200W on 80-20M, 175W on 15M and 150W on 10M.
>>>
>>> The Cathode resistors eat into your power somewhat. They need to be
>>> close to 15 ohms, ideally within 5% of each other. They're there to
>>> equalize the current through the three tubes. If the voltage across
>>> one resistor goes up, the Cathode voltage goes up, which makes the
>>> Grid slightly more negative, which reduces the current throughthat tube.
>>>
>>> You'll probably be fine once you get the alignment done. Good luck!
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> William Houghton wrote:

>>>> Hi Garey,
>>>>
>>>> I measured the output on the ends of the various bands into a dummy load.
> I'm
>>>> getting 150W to 160W at some ends. In all cases there is a noticable drop
>> from
>>>> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
>>>> 4.0MHz. I'll have a better feel for it after I align it.
>>>>
>>>> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how
much
>>>> that affects the output power.
>>>>
>>>> Now to try to bend the PTO's brass tuning rod straight unless someone has a
>>>> working TR-4 PTO available -hihi.
>>>>
>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14214. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 19:48:12 UTC
From: Garey Barrell
Topic: 13832 Message: 14214

Bill -

OK, that is definitely too much shift for that mild a shock. The PTOis VERY sensitive to the shield can movement. You have to push in on
the springs on each side to get the tang to grab the inside wall of the gearbox. If you are at all uncertain, I'd remove the shield can, and
check the firmness of the mounting screws that go through the phenolic base into the back of the gearbox. Make sure the spacers are in
there. Also look around for any 'flying' components, making sure their connections are solid, without changing their position any more than
necessary. Resolderthe tap on the coil at both ends, there is enough stress on those connections to crack. Do a visual check of all solder
on the board.

You have the correct adjustment on the rear loading screw, just enough to take out any lateral play in the MAIN TUNING knob.

There should be enough spring load to prevent the follower from moving at all,a good 4-5 ounces.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Yes, the spring is attached from the follower to the cam if that is what you
> mean. I did not clean the "bearing" end of the brass rod but it didn't look
> dirty. I did reglue the phenolic disc back into the coil. The can shield doesn't
> lock as firmly as the can on the PTO in my TR-3. On the TR-4, I can wiggle the
> can slightly with the largest gap between the can and the back of the gearbox
> being maybe 1/2 mm. That seems to cause a slight shift.
>
>
> Tapping the chassis lightly with the plastic handle of a Craftsman screwdriver
> will produce a few 100Hz shift. A firm tap (but not real hard) will cause of
> shift of about 5 to 10kHz. The FSK pin connected to a freq counter via a 10X
> scope probe confirms that the PTO freq is shifting.
>
>
> I have the allen head set screw adjusted just enough to eliminate the wobble in
> the tuning shaft and play in the dial disc. I was cautious about overtightening.

>
> thanks,
>
> Bill
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, June 7, 2013 7:38:09 AM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Bill -
>
> Is the spring from the follower to the shield can stretched out?It puts a fairly
> firm hold onthe follower and the slug. Are the brass rod
>
> and rear bearing CLEAN and unlubed? Is the shield can locked with all four
> 'tangs' engaged? Yes, if you smack it, it will change a few 10's
>
> of Hz, favorite trick is to raise the front feet off the desk an inch or two and
> dropit. It may change, but only slightly, not enoughto
>
> make an SSB signal unintelligible. Remember, this was designed for MOBILE use,
> so can't be too touchy.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
>> Garey,
>>
>> What I was calling a cam is what you call a follower. I have since discovered
>> that while the PTO holds calibration across the band bumping the chassis
>> changes
>> the freq. The amount of jump depends on the strength of the bump. Of course I
>> found this by accidentally bumping the rig. I'm wondering if that disc in the
>> back has too much wear. Bummer. I have checked ground connections, added the
>> grounding strap for the follower, etc.
>>
>>
>> Now if I had a lathe I could make a new bushing for the coil end out of
>> something like teflon.
>>

>>
>>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Fri, May 24, 2013 6:34:49 AM
>> Subject: Re: [DrakeRadio] my latest TR-4
>>
>>
>> Hi Bill -
>>
>> Proud of you!! I'm not sure I follow the 'cam' you are referring to.
>> The 'follower', which is the 'fork' threaded onto the lead screw, IS
>> threaded, but it is a very loose fit. The spring from the top of the
>> fork to the hole in the top corner of the shield can is what keeps
>> tension on it. Drake later added a short piece of shield
>> braidsoldered to the fork and to the side wall of the gearbox to
>> ensure a solid ground for the lead screw/ferrite. Originally the
>> ground was through the ball bearings and through the fork sliding
>> along the guide bar at the top of the gearbox. This should NOT be
>> lubricated.
>>
>> Yes, the phenolic 'plug' at the rear of the slug is what keepsit
>> stable within the coil. It should be a sliding fit, and the plug
>> should be arranged so that it's in a diamond shape rather than a
>> square. This minimizes the surface contact between the two pieces.
>> Also not lubricated.
>>
>> Always good to bring one back from the brink!!! Congratulations.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> William Houghton wrote:
>>> Hi Garey,
>>>
>>> I have the PTO working well. The point of the bend in the slug shaft was
> right
>>> at the threads. I was able to straighten then a little. The movable metal
>> "cam"
>>> that is driven by the leadscrew seems to have a lot of play. The cam on mine
>>> did
>>> not have threads, it was just a hole. It seems that the little plastic disk
> in
>>> the back of the coil is what holds the slug into alignment. The PTO seems to
>>> hold calibration well across the full 600kHz of the PTO.

>>>
>>>
>>>
>>>
>>> _____
>>> From: Garey Barrell <k4oah@...>
>>> To: DrakeRadio@yahoogroups.com
>>> Sent: Tue, May 21, 2013 6:55:38 AM
>>> Subject: Re: [DrakeRadio] my latest TR-4
>>>
>>>
>>> Bill -
>>>
>>> That's typical of a TR-4 with 'used' finals. Output power of 'new'
>>> finals reaches these levels in a year or so, depending upon brand,
>>> etc. ..... However, once they get to this level they tend to last a
>>> LOT longer with reasonable care.
>>>
>>> The relative values of those cathode resistors is more important than
>>> the absolute value. If you're tired of working on it, add some Ohmite
>>> OX ceramic composition resistors, or if you can find 'good' 2W carbon
>>> comps, and have them on hand for the next time you're in the mood!!
>>> :-) Metal or carbon 'film' resistors are not a good choice, as they
>>> don't care for current surges like these see.
>>>
>>> Congratulations!!
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
>>> William Houghton wrote:
>>>> Hi Garey,
>>>>
>>>> After alignment I now get:
>>>>
>>>> 80m: 160W at both ends
>>>> 40m: 140W to 160W
>>>> 20m: 150W to 160W
>>>> 15m: 120W to 130W
>>>> 10m: 130W to 140W
>>>>
>>>> with the somewhat high cathode resistors giving slightly more negative
>>> feedback
>>>> than intended. Not knowing the age of the finals I am pleased with these
>>>> results.
>>>>

>>>>
>>>> 73,
>>>>
>>>> Bill
>>>>
>>>>
>>>>
>>>>
>>>> _____
>>>> From: Garey Barrell <k4oah@...>
>>>> To: DrakeRadio@yahoogroups.com
>>>> Sent: Mon, May 20, 2013 12:32:11 PM
>>>> Subject: Re: [DrakeRadio] my latest TR-4
>>>>
>>>>
>>>> Bill -
>>>>
>>>> OK, that's not bad. Fully aligned with new PA tubes, you should see
>>>> about 200W on 80-20M, 175W on 15M and 150W on 10M.
>>>>
>>>> The Cathode resistors eat into your power somewhat. They need to be
>>>> close to 15 ohms, ideally within 5% of each other. They're there to
>>>> equalize the current through the three tubes. If the voltage across
>>>> one resistor goes up, the Cathode voltage goes up, which makes the
>>>> Grid slightly more negative, which reduces the current throughthat tube.
>>>>
>>>> You'll probably be fine once you get the alignment done. Good luck!
>>>>
>>>> 73, Garey - K4OAH
>>>> Glen Allen, VA
>>>>
>>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>>> and TR-4/C Service Supplement CDs
>>>> <www.k4oah.com>
>>>>
>>>> William Houghton wrote:
>>>>> Hi Garey,
>>>>>
>>>>> I measured the output on the ends of the various bands into a dummy load.
>> I'm
>>>>> getting 150W to 160W at some ends. In all cases there is a noticable drop
>>> from
>>>>> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W at
>>>>> 4.0MHz. I'll have a better feel for it after I align it.
>>>>>
>>>>> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how
> much
>>>>> that affects the output power.
>>>>>
>>>>> Now to try to bend the PTO's brass tuning rod straight unless someone has a

>>>>> working TR-4 PTO available -hihi.
>>>>>
>>
>>
>> [Non-text portions of this message have been removed]
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>> Yahoo! Groups Links
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> ------------------------------------
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> Yahoo! Groups Links
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>

14215. Re: [DrakeRadio] my latest TR-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-07 23:54:32 UTC
From: William Houghton
Topic: 13832 Message: 14215

Garey,

I did all you suggested and that seems to do the trick. Your are right, you have to press in on the springs to get it to grab. It now seems to be on there with no gap if I try to wiggle the can. Man, that is sensitive to the can position. The 2 inch tests cause a shift but not nearly as much as before, perhaps a littlem ore than some others but it is livable now.

Thanks & 73,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Fri, June 7, 2013 12:48:33 PM
Subject: Re: [DrakeRadio] my latest TR-4

Bill -

OK, that is definitely too much shift for that mild a shock. The PTOis VERY sensitive to the shield can movement. You have to push in on

the springs on each side to get the tang to grab the inside wall of the gearbox. If you are at all uncertain, I'd remove the shield can, and

check the firmness of the mounting screws that go through the phenolic base into the back of the gearbox. Make sure the spacers are in

there. Also look around for any 'flying' components, making sure their connections are solid, without changing their position any more than

necessary. Resolderthe tap on the coil at both ends, there is enough stress on those connections to crack. Do a visual check of all solder

on the board.

You have the correct adjustment on the rear loading screw, just enough to take out any lateral play in the MAIN TUNING knob.

There should be enough spring load to prevent the follower from moving at all,a good 4-5 ounces.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> Hi Garey,
>
> Yes, the spring is attached from the follower to the cam if that is what you
> mean. I did not clean the "bearing" end of the brass rod but it didn't look
> dirty. I did reglue the phenolic disc back into the coil. The can shield
>doesn't
> lock as firmly as the can on the PTO in my TR-3. On the TR-4, I can wiggle the
> can slightly with the largest gap between the can and the back of the gearbox
> being maybe 1/2 mm. That seems to cause a slight shift.
>
>
> Tapping the chassis lightly with the plastic handle of a Craftsman screwdriver
> will produce a few 100Hz shift. A firm tap (but not real hard) will cause of
> shift of about 5 to 10kHz. The FSK pin connected to a freq counter via a 10X
> scope probe confirms that the PTO freq is shifting.
>
>
> I have the allen head set screw adjusted just enough to eliminate the wobble
in
> the tuning shaft and play in the dial disc. I was cautious about
>overtightening.
>
> thanks,
>
> Bill
>
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Fri, June 7, 2013 7:38:09 AM
> Subject: Re: [DrakeRadio] my latest TR-4
>
>
> Bill -
>
> Is the spring from the follower to the shield can stretched out?It puts a
>fairly
> firm hold onthe follower and the slug. Are the brass rod
>
> and rear bearing CLEAN and unlubed? Is the shield can locked with all four
> 'tangs' engaged? Yes, if you smack it, it will change a few 10's
>
> of Hz, favorite trick is to raise the front feet off the desk an inch or two
>and
> dropit. It may change, but only slightly, not enoughto
>
> make an SSB signal unintelligible. Remember, this was designed for MOBILE use,
> so can't be too touchy.

>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> William Houghton wrote:
>> Garey,
>>
>> What I was calling a cam is what you call a follower. I have since discovered
>> that while the PTO holds calibration across the band bumping the chassis
>> changes
>> the freq. The amount of jump depends on the strength of the bump. Of course I
>> found this by accidentally bumping the rig. I'm wondering if that disc in the
>> back has too much wear. Bummer. I have checked ground connections, added the
>> grounding strap for the follower, etc.
>>
>>
>> Now if I had a lathe I could make a new bushing for the coil end out of
>> something like teflon.
>>
>>
>>
>> _____
>> From: Garey Barrell <k4oah@...>
>> To: DrakeRadio@yahoogroups.com
>> Sent: Fri, May 24, 2013 6:34:49 AM
>> Subject: Re: [DrakeRadio] my latest TR-4
>>
>>
>> Hi Bill -
>>
>> Proud of you!! I'm not sure I follow the 'cam' you are referring to.
>> The 'follower', which is the 'fork' threaded onto the lead screw, IS
>> threaded, but it is a very loose fit. The spring from the top of the
>> fork to the hole in the top corner of the shield can is what keeps
>> tension on it. Drake later added a short piece of shield
>> braidsoldered to the fork and to the side wall of the gearbox to
>> ensure a solid ground for the lead screw/ferrite. Originally the
>> ground was through the ball bearings and through the fork sliding
>> along the guide bar at the top of the gearbox. This should NOT be
>> lubricated.
>>
>> Yes, the phenolic 'plug' at the rear of the slug is what keepsit
>> stable within the coil. It should be a sliding fit, and the plug
>> should be arranged so that it's in a diamond shape rather than a
>> square. This minimizes the surface contact between the two pieces.
>> Also not lubricated.

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>> Always good to bring one back from the brink!!! Congratulations.
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>>> not have threads, it was just a hole. It seems that the little plastic disk
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>>> the back of the coil is what holds the slug into alignment. The PTO seems to
>>> hold calibration well across the full 600kHz of the PTO.
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>>> _____
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>>> Sent: Tue, May 21, 2013 6:55:38 AM
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>>>
>>> Bill -
>>>
>>> That's typical of a TR-4 with 'used' finals. Output power of 'new'
>>> finals reaches these levels in a year or so, depending upon brand,
>>> etc. ..... However, once they get to this level they tend to last a
>>> LOT longer with reasonable care.
>>>
>>> The relative values of those cathode resistors is more important than
>>> the absolute value. If you're tired of working on it, add some Ohmite
>>> OX ceramic composition resistors, or if you can find 'good' 2W carbon
>>> comps, and have them on hand for the next time you're in the mood!!
>>> :-) Metal or carbon 'film' resistors are not a good choice, as they
>>> don't care for current surges like these see.
>>>
>>> Congratulations!!
>>>

>>> 73, Garey - K4OAH
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>>>> 15m: 120W to 130W
>>>> 10m: 130W to 140W
>>>>
>>>> with the somewhat high cathode resistors giving slightly more negative
>>> feedback
>>>> than intended. Not knowing the age of the finals I am pleased with these
>>>> results.
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>>>> 73,
>>>>
>>>> Bill
>>>>
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>>>>
>>>> _____
>>>> From: Garey Barrell <k4oah@...>
>>>> To: DrakeRadio@yahoogroups.com
>>>> Sent: Mon, May 20, 2013 12:32:11 PM
>>>> Subject: Re: [DrakeRadio] my latest TR-4
>>>>
>>>>
>>>> Bill -
>>>>
>>>> OK, that's not bad. Fully aligned with new PA tubes, you should see
>>>> about 200W on 80-20M, 175W on 15M and 150W on 10M.
>>>>
>>>> The Cathode resistors eat into your power somewhat. They need to be
>>>> close to 15 ohms, ideally within 5% of each other. They're there to
>>>> equalize the current through the three tubes. If the voltage across
>>>> one resistor goes up, the Cathode voltage goes up, which makes the
>>>> Grid slightly more negative, which reduces the current throughthat tube.
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>>>> You'll probably be fine once you get the alignment done. Good luck!

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>>>> 73, Garey - K4OAH
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>>>>> one end to the other. For example 80m ranges from 150W at 3.5MHz to 110W
at
>>>>> 4.0MHz. I'll have a better feel for it after I align it.
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>>>>> The cathode resistors are all about 17% high at 17.5 ohms. Not sure how
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>>>>> that affects the output power.
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>>>>> Now to try to bend the PTO's brass tuning rod straight unless someone has
a
>>>>> working TR-4 PTO available -hihi.
>>>>>
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[Non-text portions of this message have been removed]

14216. Re: TR3 CW Carrier Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 00:11:39 UTC
From: KA5DWI
Topic: 13670 Message: 14216

Hi Garey,

Thank you for the advice. I appears that was the problem.
I found the 6HS6 and 12BY7 at HAM-COM today. They were fairly inexpensive compared to retail.

Plugged them in and after an hour warming up, NO carrier.

Now I can play with the Boat-anchor on CW this weekend for the SKCC Weekend Sprint-a-thon.

73s
Art KA5DWI

--- In DrakeRadio@yahoogroups.com, "KA5DWI" <ka5dwi@...> wrote:
>
> Hi all,
> I need some help. There is something I am missing somewhere, but can't seem to recall how to fix it.
>
> When I hook up a straight key to my TR3, I am setting a carrier out when the key is not depressed. It builds up over time and gets worse. Let's say on 40 watts out key down, the carrier is about 10 watts. On a 100 watts it has been as bad as 60 out.
>
> The TR3 is a lousy CW rig, but would like to play with it on "boat anchor" activities.
>
> I am not sure if the same problem exists if I hook up my electronic keyer.
>
> Thanks. I appreciate any advice.
>
> 73s
> Art KA5DWI
>

14217. AC3 Rebuild

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 02:07:48 UTC
From: Don Cunningham
Topic: 14217 Message: 14217

I don't often offer recommendations for products offered to us, but I do when they are well designed and exceptional. I have no products to sell, and no interest in the efforts I recommend. All other standard disclaimers apply, hi.

That said, in an email "QSO" with Paul Kraemer, K0UYA, about his new boards for the AC4 power supply that I had bought to upgrade a couple of my supplies, I happened to mention that I had an absolutely mint AC3 power supply that I should rebuild. I had just hesitated to even touch the supply since it was so pristine. On a whim, I sent a picture of the supply to Paul, since I know he appreciates old gear and would like to see it.

He returned in an email an "offer I couldn't refuse". He said he would do the install of his new AC3 power supply board and perforated cover on my supply if he could take pictures of it for "before and after" shots for his website he is building. I previously had offered the AC3 and its companion R4 and T4X for sale, thinking that all of it was pristine and some "collector" should have it if they wanted one like that. NO one responded at all, save one, and he has apparently disappeared.

I decided that since no one apparently wanted a pristine set, and I am a user of the gear NOT a collector, I would take Paul up on his kind offer and just let him have this supply for his pictures. Besides, I wouldn't have to install the board/cover and I would get a nice user supply for my TR4C. We made a deal that we both could live with, and off the supply went to him in Iowa. Well, I got the supply back yesterday, and all I can say is "WOW!!!". The board is immaculate, well designed and is now the supply is totally safe. I have seen AC3's over the years, "cobbled up" in all fashions, most now death traps, but this supply is now good for another 50 years of service.

I should have known I would be impressed, as Paul's AC4 boards FAR exceeded my expectations, even though I have procrastinated and not yet installed either that I bought. The AC3 works VERY well, has a nice perforated cover over the board to make it safe (since the AC3 has no top cover). This will probably be a cooler supply than the AC4 since it doesn't have the top cover to hold the heat in. I know I won't miss the "THUMP" when it comes on anymore, hi.

I very highly recommend Paul's work and the AC3 and AC4 boards to you. I hesitate to call them "kits", as they are professionally built and fully tested before you get them!! All you have to do is gut most of the old supply and install the new boards as directed with nice, clear instructions. They have already been "field tested" by many and all the bugs in documentation have been discovered. If you have been procrastinating in getting with him, don't do it any longer. I won't speak for him, but feel

sure if you have been wanting to do your supplies and haven't had the time or inclination, he would talk to you about doing the job for you. Contact Paul at elespe@... if you have pricing or other questions. You'll not be sorry, and you WILL end up with a nice supply for your Drakes.

Thanks, Paul!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3199/6393 - Release Date: 06/07/13

14218. WTB: T4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 14:35:13 UTC
From: yash@aol.com
Topic: 14218 Message: 14218

Looking for a t4xc. want to complete a C-line ,so only looking for the C. will consider all offers. Please get back off list.
thanks
dale wt4t
239 283 2665

[Non-text portions of this message have been removed]

14219. Re: [DrakeRadio] not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 15:16:26 UTC
From: Mark Pilant
Topic: 14194 Message: 14219

> gentlemen, I have a non transmitting TR4, already checked all the
> tubes and replaced 2, power tubes are all beaten up but at least
> they should put 20W, power supply is just recapped and voltages
> are within specs, relays activate when needed and receiver is clear
> and loud in all bands, cleaned all contacts and controls, impossible
> to set .1 in bias according to the manual, but if measured directly
> from the pin 2 in either final, -62 variable bias voltage is
> encountered.

It looks like you may have already solve your problem, but wanted to add one thing I did when bringing back a TR-4 I obtained; which had been sitting for quite a while. (All of this is in the archives.)

After doing all the usual cleanup, getting rid of dust and other substances and using contact cleaner on the usual cast of characters, I was still seeing some really strange voltages when comparing to the voltage chart.

What I did to correct this problem was also clean all the vacuum tube pins as well as the tube sockets. After doing that a couple of times, the voltages were much more in line and thing really started to work a great deal better. BTW, I was using DeoxIt.

For what it is worth.

73

- Mark N1VQW

14220. Re: not transmitting tr4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 15:57:40 UTC
From: milton_valerio
Topic: 14194 Message: 14220

--- In DrakeRadio@yahoogroups.com, Mark Pilant <n1vqw@...> wrote:

> It looks like you may have already solve your problem, but wanted to
> add one thing I did when bringing back a TR-4 I obtained; which had
> been sitting for quite a while. (All of this is in the archives.)
>
> After doing all the usual cleanup, getting rid of dust and other
> substances and using contact cleaner on the usual cast of characters,
> I was still seeing some really strange voltages when comparing to the
> voltage chart.
>
> What I did to correct this problem was also clean all the vacuum tube
> pins as well as the tube sockets. After doing that a couple of times,
> the voltages were much more in line and thing really started to work
> a great deal better. BTW, I was using DeoxIt.
>
> For what it is worth.
>
> 73
>
> - Mark N1VQW
>

Thanks for the advice, what I do is put some car polish in the pins and pull in and out several times to polish the contact area in very dirty contacts, what I have found is that it is only transmitting in 40 mts, nothing on 80, 20, 15 or 10 but I found out that giving a little hit to the chassis with the handle of a screwdriver it starts working, so something is not making good contact, now the hard part is to find which is..

14221. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 23:31:20 UTC
From: Jim Shorney
Topic: 14202 Message: 14221

I concur. they are present in my rig as well, but do not move the S-Meter.

73

-Jim
NU0C

On Fri, 07 Jun 2013 10:47:51 -0400, Garey Barrell wrote:

>Chuck -
>
>Yes, they are there, but they shouldn't move the S-Meter.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>aa5wg wrote:
>> Can anyone duplicate this loud digital clock noise on your TR-7?
>>
>> Setup:
>>
>> TR-7 connected to 50 ohm dummy load
>> PBT = Off
>> Wide SSB filter selected = BW buttons out or not depressed position
>> AGC = Fast
>> RIT = off
>>
>> Mode Switch Position:
>>
>> 1. AM = 5339.7 MHz = S6 digital clock noise
>> 2. RTTY = 5342.1 MHz = S7 digital clock noise
>> 3. CW = 5336.9 MHz = S2 digital clock noise and 5338.9 S2 digital clock noise (double hump)
>> 4. LSB = 5341.1 = digital S6 clock noise
>> 5. USB = 5336.3 = digital S5 clock noise
>>
>> Thank you,
>>
>> Chuck
>>
>
>

--

☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14222. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-08 23:59:20 UTC
From: Chuck Pool
Topic: 14202 Message: 14222

Jim, Garey and all,

I guess the next step to reduce S6 digital clock noise to S0 is to take all the boards out and clean the contacts with Deoxit.

What do you think?

Chuck

From: Jim Shorney <jshorney@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Saturday, June 8, 2013 7:31 PM
Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

I concur. they are present in my rig as well, but do not move the S-Meter.

73

-Jim
NU0C

On Fri, 07 Jun 2013 10:47:51 -0400, Garey Barrell wrote:

>Chuck -
>
>Yes, they are there, but they shouldn't move the S-Meter.
>
>73, Garey - K4OAH
>Glen Allen, VA
>
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>> TR-7 connected to 50 ohm dummy load
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>> Mode Switch Position:

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>> 1. AM = 5339.7 MHz = S6 digital clock noise
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>> 4. LSB = 5341.1 = digital S6 clock noise
>> 5. USB = 5336.3 = digital S5 clock noise
>>
>> Thank you,
>>
>> Chuck
>>
>
>

--
“There’s something out of place – let’s go and poke it with a stick.” – The Doctor, "Amy’s Choice"

[Non-text portions of this message have been removed]

14223. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 01:50:05 UTC
From: Garey Barrell
Topic: 14202 Message: 14223

Chuck -

That's a good start. While you're at it, make sure all the copper spring ground tabs are bent up to where they are making contact. Also,
be sure all the screws are in the cover plate over the card cage.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chuck Pool wrote:
> Jim, Garey and all,
>
> I guess the next step to reduce S6 digital clock noise to S0 is to take all the boards out and clean the contacts with Deoxit.
>
>
> What do you think?
>
> Chuck
>
>
>
> _____
> From: Jim Shorney <jshorney@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Saturday, June 8, 2013 7:31 PM
> Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
>
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>
> I concur. they are present in my rig as well, but do not move the S-Meter.
>
> 73
>
> -Jim
> NU0C
>
> On Fri, 07 Jun 2013 10:47:51 -0400, Garey Barrell wrote:
>
>> Chuck -

>>
>> Yes, they are there, but they shouldn't move the S-Meter.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>>
>> aa5wg wrote:
>>> Can anyone duplicate this loud digital clock noise on your TR-7?
>>>
>>> Setup:
>>>
>>> TR-7 connected to 50 ohm dummy load
>>> PBT = Off
>>> Wide SSB filter selected = BW buttons out or not depressed position
>>> AGC = Fast
>>> RIT = off
>>>
>>> Mode Switch Position:
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>>> 1. AM = 5339.7 MHz = S6 digital clock noise
>>> 2. RTTY = 5342.1 MHz = S7 digital clock noise
>>> 3. CW = 5336.9 MHz = S2 digital clock noise and 5338.9 S2 digital clock noise (double hump)
>>> 4. LSB = 5341.1 = digital S6 clock noise
>>> 5. USB = 5336.3 = digital S5 clock noise
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>>> Thank you,
>>>
>>> Chuck
>>>
>>
> --
> “There’s something out of place – let’s go and poke it with a stick.” – The Doctor, "Amy’s Choice"
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14224. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 01:52:24 UTC
From: Garey Barrell
Topic: 14202 Message: 14224

Chuck -

I don't believe this is DC-DC converter noise, but while you're mucking around in there be sure the shorted turn of insulated wire is firmly
inplace around the small transformer on the Power Supply card. Contrary to what some have said, it's not there to hold the transformer
together!! Aside from being wrapped the wrong way for that!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> _____
> From: Jim Shorney <jshorney@...>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Saturday, June 8, 2013 7:31 PM
> Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
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>> Yes, they are there, but they shouldn't move the S-Meter.
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>>> Mode Switch Position:
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>>> 4. LSB = 5341.1 = digital S6 clock noise
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>>> Thank you,
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>>> Chuck
>>>
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> --
> “There’s something out of place – let’s go and poke it with a stick.” – The Doctor, "Amy’s Choice"
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14225. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 02:07:04 UTC
From: Don Cunningham
Topic: 14202 Message: 14225

Garey,

I have always wondered about that card cage. What are your thoughts about adding star washers under the screws holding the cage cover down?? I have a couple of them that have gotten "wallowed out" (fine technical term, huh??) over the years and that makes it hard to keep contact. I have been lucky in "hammering out" from the back side some of them, but that even doesn't work after a few times. We do have to get in there often to clean the contacts, so this will get even worse.

Just thought someone may have discovered something that works really well. The thought just occurred to me the other day while in the "new" orphan I just got that thin star washers just might be a solution.

73,
Don, WB5HAK

----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Saturday, June 08, 2013 8:50 PM
Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Chuck -

That's a good start. While you're at it, make sure all the copper spring ground tabs are bent up to where they are making contact. Also,
be sure all the screws are in the cover plate over the card cage.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Chuck Pool wrote:
> Jim, Garey and all,
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>
>
> What do you think?
>
> Chuck
>
>

>
> _____
> From: Jim Shorney <jshorney@inebraska.com>
> To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> Sent: Saturday, June 8, 2013 7:31 PM
> Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
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> I concur. they are present in my rig as well, but do not move the S-Meter.
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>> Chuck -
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>> Yes, they are there, but they shouldn't move the S-Meter.
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>>> 4. LSB = 5341.1 = digital S6 clock noise
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>>>
>>> Thank you,
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>>> Chuck
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>>
> --
> “There’s something out of place – let’s go and poke it with a stick.” – The Doctor, "Amy’s Choice"
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>
> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3199/6394 - Release Date: 06/08/13

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3199/6394 - Release Date: 06/08/13

[Non-text portions of this message have been removed]

14226. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 02:25:01 UTC
From: Jim Shorney
Topic: 14202 Message: 14226

My previus comments on this topic in message #14143:

Strange 7-line problems are often cured by simply re-seating all of the plug-in boards, or cleaning the contacts and then re-seating. You will want to make sure that the copper grounding fingers attached to some of the boards are clean and making good contact with the frame when the board is inserted. The screws securing the card cage cover should be *snug*, but do not over-tighten or they will strip. Check all grounding screws throughout the radio by slightly loosening them and snugging them back up.

73

-Jim
NU0C

On Sat, 8 Jun 2013 16:59:20 -0700 (PDT), Chuck Pool wrote:

>Jim, Garey and all,
>
>I guess the next step to reduce S6 digital clock noise to S0 is to take all the boards out and clean the contacts with Deoxit.
>
>
>What do you think?
>
>Chuck
>
>
>
>_____
> From: Jim Shorney <jshorney@inebraska.com>
>To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
>Sent: Saturday, June 8, 2013 7:31 PM
>Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
>
>
>
>Â
>
>I concur. they are present in my rig as well, but do not move the S-Meter.
>
>73
>
>-Jim
>NU0C

>
>On Fri, 07 Jun 2013 10:47:51 -0400, Garey Barrell wrote:
>
>>Chuck -
>>
>>Yes, they are there, but they shouldn't move the S-Meter.
>>
>>73, Garey - K4OAH
>>Glen Allen, VA
>>
>>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>><www.k4oah.com>
>>
>>aa5wg wrote:
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>>> Mode Switch Position:
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>>> Thank you,
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>â□□Thereâ□□s something out of place â□□ letâ□□s go and poke it with a stick.â□□ â□□ The Doctor,
"Amyâ□□s Choice"
>
>
>
>
>[Non-text portions of this message have been removed]
>

>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14227. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 02:31:41 UTC
From: Jim Shorney
Topic: 14202 Message: 14227

OK, I'm not Garey, but I don't think I would use star washers. They could chew up the aluminum over time, compounding the problem. I've used flat washers under the screw heads, but the downside of that is that you have to remove the screws completely to take the cover off. If the cover deteriorates too much, I'll probably go back to the flat washers.

Or maybe someone with the resources will start making repro card cage covers...

73

-Jim
NU0C

On Sat, 8 Jun 2013 21:07:04 -0500, Don Cunningham wrote:

>Garey,
>
>I have always wondered about that card cage. What are your thoughts about adding star washers under the screws holding the cage cover down?? I have a couple of them that have gotten "wallowed out" (fine technical term, huh??) over the years and that makes it hard to keep contact. I have been lucky in "hammering out" from the back side some of them, but that even doesn't work after a few times. We do have to get in there often to clean the contacts, so this will get even worse.
>
>Just thought someone may have discovered something that works really well. The thought just occurred to me the other day while in the "new" orphan I just got that thin star washers just might be a solution.
>
>73,
>Don, WB5HAK
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>
> ----- Original Message -----
> From: Garey Barrell
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, June 08, 2013 8:50 PM
> Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
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> Chuck -
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> be sure all the screws are in the cover plate over the card cage.
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> Glen Allen, VA
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> Chuck Pool wrote:
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> >
> >
> >
> > _____
> > From: Jim Shorney <jshorney@...>
> > To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
> > Sent: Saturday, June 8, 2013 7:31 PM
> > Subject: Re: [DrakeRadio] TR-7 Loud Digital Clock Noise
> >
> >
> >
> >
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> > I concur. they are present in my rig as well, but do not move the S-Meter.
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> > -Jim
> > NU0C
> >
> > On Fri, 07 Jun 2013 10:47:51 -0400, Garey Barrell wrote:
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> >> Chuck -
> >>
> >> Yes, they are there, but they shouldn't move the S-Meter.
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> >> aa5wg wrote:
> >>> Can anyone duplicate this loud digital clock noise on your TR-7?
> >>>
> >>> Setup:
> >>>
> >>> TR-7 connected to 50 ohm dummy load
> >>> PBT = Off
> >>> Wide SSB filter selected = BW buttons out or not depressed position
> >>> AGC = Fast
> >>> RIT = off
> >>>
> >>> Mode Switch Position:
> >>>
> >>> 1. AM = 5339.7 MHz = S6 digital clock noise
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> >>>
> >>> Thank you,
> >>>
> >>> Chuck

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14228. Re: [DrakeRadio] TR-7 Loud Digital Clock Noise

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 03:00:46 UTC
From: Don Cunningham
Topic: 14202 Message: 14228

Thanks, Jim. I really meant "Garey and all", I just had a one track mind for some reason. If you hadn't chimed in, I would have asked directly, hi. Thanks for the comment, I can see what you are saying and hadn't thought through that. The ones I meant were the "inside star" washers with a lesser impact, but I will try just a few flat washers where they just have to be used (head now goes all the way through the hole). Not many of those, and I do have a parts donor or two left. Garey just triggered a memory.

73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3199/6394 - Release Date: 06/08/13

[Non-text portions of this message have been removed]

14229. Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 03:45:29 UTC
From: rdl014
Topic: 14229 Message: 14229

I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.

After re-tubing, I thought I might as well adjust the notch filter as it did not seem to be doing a very good job. I had the covers off the radio and had it setting on my work desk.

I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.

As I checked to make sure all the switches were in the proper place to adjust the notch filter, I heard a loud "pop" and saw smoke coming from under the chassis, right rear beneath the area of the transformer. All lights and tubes remained on, sound stopped, but I did hurriedly turn off the receiver and unplug it.

Under the chassis, I found the blown out shell of a 10 microfarad electrolytic capacitor lying on the desk. Strangely though, I do not see where it was located.

Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.

Thanks and 73, Ray AK4RL

14230. Re: [DrakeRadio] Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 06:59:47 UTC
From: Dan Galligan
Topic: 14229 Message: 14230

It has been a while, since I tinkered inside of my R4B, and I can't tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's CD, for servicing the "B" Line. It has WONDERFUL, high resolution photos, that will likely tell you, where to find the connection points. In this day, and age, it is a necessity, for keeping any set of Drake Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is the best $25 (I think that's the price) you will spend, on your Drake. An invaluable tool, to say the least.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:

> I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.
>
> After re-tubing, I thought I might as well adjust the notch filter as it did not seem to be doing a very good job. I had the covers off the radio and had it setting on my work desk.
>
> I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.
>
> As I checked to make sure all the switches were in the proper place to adjust the notch filter, I heard a loud "pop" and saw smoke coming from under the chassis, right rear beneath the area of the transformer. All lights and tubes remained on, sound stopped, but I did hurriedly turn off the receiver and unplug it.
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> Under the chassis, I found the blown out shell of a 10 microfarad electrolytic capacitor lying on the desk. Strangely though, I do not see where it was located.
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> Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.
>
> Thanks and 73, Ray AK4RL
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14231. Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 12:57:32 UTC
From: fred
Topic: 14229 Message: 14231

C173 10ufd/25vdc . connects to junction of R127 and R145 . check that R127 is 10Kohm . kd5pnt

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> It has been a while, since I tinkered inside of my R4B, and I can't tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's CD, for servicing the "B" Line. It has WONDERFUL, high resolution photos, that will likely tell you, where to find the connection points. In this day, and age, it is a necessity, for keeping any set of Drake Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is the best $25 (I think that's the price) you will spend, on your Drake. An invaluable tool, to say the least.
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> 73,
> Dan
> W3RXO/W6
> Evening Shade, OK
> EM25no
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
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>
> The problem with socialism is, that you will eventually run out of other peoples' money.
> Margaret Thatcher
>
> Sent from my iPad.
>
> On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:
>
> > I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.
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> > I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.
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beneath the area of the transformer. All lights and tubes remained on, sound stopped, but I did hurriedly turn off the receiver and unplug it.
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> > Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.
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> > Thanks and 73, Ray AK4RL
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
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> >
>
>
> [Non-text portions of this message have been removed]
>

14232. Re: [DrakeRadio] Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 14:28:48 UTC
From: Garey Barrell
Topic: 14229 Message: 14232

Ray -

You just had lesson one in why it's never a good idea to replace ALL tubes at once!!
'Re-tubing' is fine for spark plugs, but not radios.
Every tube you put in there is over 30 years old, perhaps older. Maybe good, maybe not.
Tube testers don't always tell the truth. Now you
know why the 'noise level' was so low....! :-)

Anyway, lecture over. What does this cap look like, size, color? Most 10 uF caps in the
R-4B are little teardrop tantalums, and they don't
leave a 'shell' when they go, more like dust!. Perhaps C91, the BIAS supply cap? It's
originally 8 uF @150V, but......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

rdl014 wrote:
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> After re-tubing, I thought I might as well adjust the notch filter as it did not seem to be doing a very good job. I had the covers off the radio and had it setting on my work desk.
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> I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.
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> As I checked to make sure all the switches were in the proper place to adjust the notch filter, I heard a loud "pop" and saw smoke coming from under the chassis, right rear beneath the area of the transformer. All lights and tubes remained on, sound stopped, but I did hurriedly turn off the receiver and unplug it.
>
> Under the chassis, I found the blown out shell of a 10 microfarad electrolytic capacitor lying on the desk. Strangely though, I do not see where it was located.
>
> Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.
>
> Thanks and 73, Ray AK4RL

>
>

14233. Re: [DrakeRadio] Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 16:59:09 UTC
From: Steve Wedge
Topic: 14229 Message: 14233

Dan, that sounds like the bias supply cap - though they were 8 uf from the factory. When replacing, remember that the positive side is grounded. While you're digging around the power supply area, make sure those high-wattage dropping resistors are in good shape and replace them if they look suspect.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Dan Galligan
Sent: Sunday, June 09, 2013 2:59 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Let Smoke Out

It has been a while, since I tinkered inside of my R4B, and I can't tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's CD, for servicing the "B" Line. It has WONDERFUL, high resolution photos, that will likely tell you, where to find the connection points. In this day, and age, it is a necessity, for keeping any set of Drake Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is the best $25 (I think that's the price) you will spend, on your Drake. An invaluable tool, to say the least.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:

> I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.
>

> After re-tubing, I thought I might as well adjust the notch filter as it did not seem to be doing a very good job. I had the covers off the radio and had it setting on my work desk.
>
> I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.
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> Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.
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> Thanks and 73, Ray AK4RL
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[Non-text portions of this message have been removed]

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14234. Re: [DrakeRadio] Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 19:05:45 UTC
From: Charles Ring
Topic: 14229 Message: 14234

This happened to my R-4B long ago. I was in the next room and it sounded as if something heavy had fallen on the wood floor. My notes on the schematic say it was C91, 8 uF at 150V. The blown cap was in tiny pieces that took a while to pick out with long nose pliers. As Steve Wedge said, the positive side of the cap goes to ground. Probably unrelated to the tubes or the notch filter.

73 de W3NU

On 6/8/2013 2345, rdl014 wrote:
>
> I recently bought a nice Drake R-4B receiver and thought that I would
> re-tube the radio as it did seem to be a little weaker and noisier
> that I thought it should be. I assembled the required new tubes and
> proceeded to swap out the tubes and did a double check to make sure
> that the right tube went in the proper socket.
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> and the mute plug in. I was pleasantly surprised to find that the
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> see where it was located.
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> Any suggestions as to where this capacitor may have been attached and
> if just re-tubing could have thrown enough extra stress on the
> capacitor to cause it to blow.
>
> Thanks and 73, Ray AK4RL
>

[Non-text portions of this message have been removed]

14235. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 19:23:21 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 14235

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

14236. Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 21:05:43 UTC
From: rdl014
Topic: 14229 Message: 14236

Under better lighting (daylight), I now see that the capacitor that blew was connected between pin 1 of V-7 (6EH5) audio output tube and a ground lug on the chassis. My schematic does not show the values of the parts though.

I know it is 10 microfarads from the blown case but what is the voltage rating of this capacitor?

Thanks and 73, Ray AK4RL

--- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>
> It has been a while, since I tinkered inside of my R4B, and I can't tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's CD, for servicing the "B" Line. It has WONDERFUL, high resolution photos, that will likely tell you, where to find the connection points. In this day, and age, it is a necessity, for keeping any set of Drake Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is the best $25 (I think that's the price) you will spend, on your Drake. An invaluable tool, to say the least.
>
> 73,
> Dan
> W3RXO/W6
> Evening Shade, OK
> EM25no
>
> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
> As well as, classic old, vacuum tube ham radios.
>
> The problem with socialism is, that you will eventually run out of other peoples' money.
> Margaret Thatcher
>
> Sent from my iPad.
>
> On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:
>
> > I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.
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> [Non-text portions of this message have been removed]
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14237. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 21:28:04 UTC
From: Al Parker
Topic: 14229 Message: 14237

Hi Ray,
That's the cathode of the 6EH5, the cap is an audio bypass. A 25 volt rating will be sufficient, pos. to tube, neg. to gnd. Not critical for general operation, but will make the audio sound crappy (technical term there).
I'll 2nd the suggestion to get Garey's CD if you plan to use/maintain this unit.
73,

Al, W8UT
www.boatanchors.org
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much worth doing as simply messing about in boats"
Ratty, to Mole

On 6/9/2013 5:05 PM, rdl014 wrote:
> Under better lighting (daylight), I now see that the capacitor that blew
> was connected between pin 1 of V-7 (6EH5) audio output tube and a ground
> lug on the chassis. My schematic does not show the values of the parts
> though.
>
> I know it is 10 microfarads from the blown case but what is the voltage
> rating of this capacitor?
>
> Thanks and 73, Ray AK4RL
>
> --- In DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>,
> Dan Galligan <w3rxo@...> wrote:
> >
> > It has been a while, since I tinkered inside of my R4B, and I can't
> tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's
> CD, for servicing the "B" Line. It has WONDERFUL, high resolution
> photos, that will likely tell you, where to find the connection points.
> In this day, and age, it is a necessity, for keeping any set of Drake
> Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is
> the best $25 (I think that's the price) you will spend, on your Drake.
> An invaluable tool, to say the least.
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> > 73,
> > Dan
> > W3RXO/W6
> > Evening Shade, OK
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> in precious metals, like platinum, gold and silver.
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> >
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> >
> > On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:
> >
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14238. Re: [DrakeRadio] Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 21:29:36 UTC
From: Jim Shorney
Topic: 14229 Message: 14238

Still, Garey is correct. It's never a good plan to replace all the tubes just because you can.

73

-Jim
NU0C

On Sun, 09 Jun 2013 15:05:45 -0400, Charles Ring wrote:

>Probably unrelated to
>the tubes

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14239. Narrow filter insertion loss

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 21:58:12 UTC
From: Steve Wedge
Topic: 14239 Message: 14239

Does anyone have access to rough figures of what the insertion losses are of the C-Line 1.5, 0.5 and 0.25 crystal filters compared with the 2.4 filter? Just curious, as I notice the level of the calibrator does drop off as you go narrower.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14240. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 22:00:56 UTC
From: Steve Wedge
Topic: 14229 Message: 14240

It's a little tight in there but quite doable with a Weller station with a normal conical tip.

And yes, the negative goes to the chassis on that one.

You might want to consider re-capping the whole rig unless the failure was due to an overvoltage situation.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: "Al Parker" <anchor@...>
Sent: Sunday, June 09, 2013 5:28 PM
To: <DrakeRadio@yahoogroups.com>
Cc: "rdl014" <rdl014@...>
Subject: Re: [DrakeRadio] Re: Let Smoke Out

> Hi Ray,
> That's the cathode of the 6EH5, the cap is an audio bypass. A 25 volt
> rating will be sufficient, pos. to tube, neg. to gnd. Not critical for
> general operation, but will make the audio sound crappy (technical term
> there).
> I'll 2nd the suggestion to get Garey's CD if you plan to use/maintain
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> 73,
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> Al, W8UT
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> "There is nothing -- absolutely nothing -- half so much
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> On 6/9/2013 5:05 PM, rdl014 wrote:
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>> I know it is 10 microfarads from the blown case but what is the voltage
>> rating of this capacitor?

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>> Thanks and 73, Ray AK4RL
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>> --- In DrakeRadio@yahoogroups.com <mailto:DrakeRadio%40yahoogroups.com>,
>> Dan Galligan <w3rxo@...> wrote:
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>> > It has been a while, since I tinkered inside of my R4B, and I can't
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>> An invaluable tool, to say the least.
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>> > 73,
>> > Dan
>> > W3RXO/W6
>> > Evening Shade, OK
>> > EM25no
>> >
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>> other peoples' money.
>> > Margaret Thatcher
>> >
>> > Sent from my iPad.
>> >
>> > On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:
>> >
>> > > I recently bought a nice Drake R-4B receiver and thought that I
>> would re-tube the radio as it did seem to be a little weaker and noisier
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14241. Peaking the RF trimmers and those 10k resistors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 22:05:28 UTC
From: Steve Wedge
Topic: 14241 Message: 14241

I think I heard once that the reason for putting the 10k resistors on S1D and S1E was to make them less sensitive during alignment (lower the Q, perhaps?). I just tried doing this with an R-4C instead of my usual peaking on the correct frequency with no loads attached, and I couldn't get the two rear trimmers to peak at all. After removing the loads the sensitivity was horrendous. Needless to say, I reverted back to peaking the trimmers with no loads and the rig is back to normal.

Why did they want you to use these loads?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14242. price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 22:13:37 UTC
From: yash@aol.com
Topic: 14242 Message: 14242

Was looking on ebay at the drake listing,when I spotted a non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish I had 10 of the things, what a way to make money. Can't believe the prices for a simple AC-4.
dale wt4t

[Non-text portions of this message have been removed]

14243. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-09 23:57:49 UTC
From: Richard Knoppow
Topic: 14229 Message: 14243

----- Original Message -----
From: "rdl014" <rdl014@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 2:05 PM
Subject: [DrakeRadio] Re: Let Smoke Out

> Under better lighting (daylight), I now see that the
> capacitor that blew was connected between pin 1 of V-7
> (6EH5) audio output tube and a ground lug on the chassis.
> My schematic does not show the values of the parts though.
>
> I know it is 10 microfarads from the blown case but what
> is the voltage rating of this capacitor?
>
> Thanks and 73, Ray AK4RL

On my schematic it is shown as C-176 10uF 25V. It is the cathode bypass cap for the audio. The designation and information for the cap is off-set a bit so it looks like there is nothing there but a plus sign. Maybe its left off some versions of the schematic.
The tube socket voltage chart shows pin one to have 4.5 volts on it. I guess even low voltage caps can explode. But this is odd because the cap is not subject to high voltage. Are you sure this is the cap that blew up? If it is check further to see what caused it. If this tube was replaced check to see that the right type of tube was used and that the new tube does not have some sort of strange short. If you don't have a tube tester an ohm meter should show something like this.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14244. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 00:02:33 UTC
From: Richard Knoppow
Topic: 14229 Message: 14244

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 3:00 PM
Subject: Re: [DrakeRadio] Re: Let Smoke Out

> It's a little tight in there but quite doable with a
> Weller station with a
> normal conical tip.
>
> And yes, the negative goes to the chassis on that one.
>
> You might want to consider re-capping the whole rig unless
> the failure was
> due to an overvoltage situation.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of
> wisdom appended
> thereto.
>
Having struggled with some problems in an R4XB I think
the only caps that should be replaced are the electrolytic
ones. Most of the others seem to be either plastic film or
ceramic caps. These are usually very reliable and long
lived. The construction of the Drake B series is so tight
that I think its best leave alone anything that is not
definitely broken.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14245. Radio obituary

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 00:08:53 UTC
From: John Sehring
Topic: 14245 Message: 14245

Oh, I'm so sad to read of such butchery!

There is not an infinite supply of Boat Anchor equipment left. No need to trash what remains.

The death toll is two Heath monitor scopes (HO-10 & SB-614), one TR-7 (where did the chassis come from? The rest of the radio?), and one Drake TC-2.

(I own a pair of Heath SB-620's, HO-10, and a pair of SB-620's. All nicely working, all in original shape, thank you kindly.)

Gone, gone, gone, never to be seen again.

And what's left? Zombie hybrid junk that has basically no value. In so many words, it's just crap. Non-reversible, unrestorable.

For Gawd's sake, what's this mania? I could shoe-horn a Chevvy engine into a Ford chassis. Call it what, a "Fordolette"? To what end? The point?

Rant mode = "off".

--John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada

>>>OK, back to Drake – does anyone have any info on a 4-line style monitorscope? Lee Craner (on here) has done a gorgeous job on a 7-line style scope he made using a TR-7 chassis and a Heath SB–614. That’s the only one I have ever seen other than the “Drake HO-10” I have here. I did not make it but did improve it, and will continue to do so. The puzzling part is the front panel, which appears to be done “at the factory”. It’s not the kind of painting just anyone could do. It looks just like the Drakes. It is a Heath HO-10 built into a Drake TC-2 cabinet. Would love to know if someone at the Drake factory had this thing made up. Already asked Bill years ago but he knew nothing about it. I found it in the back of a station wagon at Dayton moments before the fleamarket opened, maybe 8 years ago. Happened to come across a guy who offered me a fleamarket ticket at half price at 7 am that morning! Glad I bought it!

14246. Re: [DrakeRadio] Radio obituary

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 00:16:57 UTC
From: vacuuminded2@...
Topic: 14245 Message: 14246

Usually when people "make" equipment like that, the parts were from units in very poor condition or already parts radios. If someone took a perfectly good working TR-7 and made it into a scope, different story- But finding someone who would actually commit such a heinous crime would be far and few between.

Don't get your bloomers in a wad

Chris

Sent from my outdated iPhone wireless thingy

On Jun 9, 2013, at 7:08 PM, John Sehring <wb0eq@yahoo.com> wrote:

> Oh, I'm so sad to read of such butchery!
>
> There is not an infinite supply of Boat Anchor equipment left. No need to trash what remains.
>
> The death toll is two Heath monitor scopes (HO-10 & SB-614), one TR-7 (where did the chassis come from? The rest of the radio?), and one Drake TC-2.
>
> (I own a pair of Heath SB-620's, HO-10, and a pair of SB-620's. All nicely working, all in original shape, thank you kindly.)
>
> Gone, gone, gone, never to be seen again.
>
> And what's left? Zombie hybrid junk that has basically no value. In so many words, it's just crap. Non-reversible, unrestorable.
>
> For Gawd's sake, what's this mania? I could shoe-horn a Chevvy engine into a Ford chassis. Call it what, a "Fordolette"? To what end? The point?
>
> Rant mode = "off".
>
> --John Sehring VE6EQR-WB0EQ nr Calgary, Alberta, Canada
>
> >>>OK, back to Drake – does anyone have any info on a 4-line style monitorscope? Lee Craner (on here) has done a gorgeous job on a 7-line style scope he made using a TR-7 chassis and a Heath SB–614. That’s the only one I have ever seen other than the “Drake HO-10” I have here. I did not make it but did improve it, and will continue to do so. The puzzling part is the front panel, which appears to be done “at the factory”. It’s not the kind of painting just anyone could do. It looks just like the Drakes. It is a Heath HO-10 built into a Drake TC-2 cabinet. Would love to know if someone at the Drake factory had this thing made up. Already asked Bill years ago but he knew nothing about it. I found it in the back of a station wagon at Dayton moments before the fleamarket opened, maybe 8 years ago. Happened to come across a guy who offered me a fleamarket ticket at half price

at 7 am that morning! Glad I bought it!
>

[Non-text portions of this message have been removed]

14247. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 01:14:04 UTC
From: Steve Wedge
Topic: 14229 Message: 14247

That one is an electrolytic, Richard. It's included in the re-cap kit from Hayseed.

I'm suspecting with older radios that some will have caps that dry-out faster than others. I still find quite a few receivers with perfectly good electrolytics in them. I just sold an R-4 that was all original and there was no hum or other evidence of bad caps anywhere, and I've worked on R-4C's that have loads of hum / caps that have gone EOL. Could be if they're stored in an attic they dry out faster, or, who knows? Even use will affect that, I suppose.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: "Richard Knoppow" <1oldlens1@...>
Sent: Sunday, June 09, 2013 8:02 PM
To: <DrakeRadio@yahoogroups.com>
Subject: Re: [DrakeRadio] Re: Let Smoke Out

>
> ----- Original Message -----
> From: "Steve Wedge" <w1es1982@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, June 09, 2013 3:00 PM
> Subject: Re: [DrakeRadio] Re: Let Smoke Out
>
>
>> It's a little tight in there but quite doable with a
>> Weller station with a
>> normal conical tip.
>>
>> And yes, the negative goes to the chassis on that one.
>>
>> You might want to consider re-capping the whole rig unless
>> the failure was
>> due to an overvoltage situation.
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>

>>
>> All my computers have my signature with various pearls of
>> wisdom appended
>> thereto.
>>
> Having struggled with some problems in an R4XB I think
> the only caps that should be replaced are the electrolytic
> ones. Most of the others seem to be either plastic film or
> ceramic caps. These are usually very reliable and long
> lived. The construction of the Drake B series is so tight
> that I think its best leave alone anything that is not
> definitely broken.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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> Yahoo! Groups Links
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14248. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 01:22:23 UTC
From: Garey Barrell
Topic: 14229 Message: 14248

Ray -

I see you have identified the blown cap. Check the value and condition of the resistor R44. If OK, when you replace the cap, immediately
check the voltage on Pin 1 of V7. Itshould be very close to 4.5 VDC. If not, you may have a bad 6EH5. Other possibilities are a leaky C87
or C185.

By the way, the identity of C176 is shown just above R95. Just a Drake schematic quirk! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

rdl014 wrote:
> Under better lighting (daylight), I now see that the capacitor that blew was connected between pin 1 of V-7 (6EH5) audio output tube and a ground lug on the chassis. My schematic does not show the values of the parts though.
>
> I know it is 10 microfarads from the blown case but what is the voltage rating of this capacitor?
>
> Thanks and 73, Ray AK4RL
>
> --- In DrakeRadio@yahoogroups.com, Dan Galligan <w3rxo@...> wrote:
>> It has been a while, since I tinkered inside of my R4B, and I can't tell you, where it goes. But, I STRONGLY suggest getting Garey, K4OAH's CD, for servicing the "B" Line. It has WONDERFUL, high resolution photos, that will likely tell you, where to find the connection points. In this day, and age, it is a necessity, for keeping any set of Drake Twins, or a Tr-3/4, up and running well. Trust me, I believe that it is the best $25 (I think that's the price) you will spend, on your Drake. An invaluable tool, to say the least.
>>
>> 73,
>> Dan
>> W3RXO/W6
>> Evening Shade, OK
>> EM25no
>>
>> In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
>> Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
>> As well as, classic old, vacuum tube ham radios.
>>

>> The problem with socialism is, that you will eventually run out of other peoples' money.
>> Margaret Thatcher
>>
>> Sent from my iPad.
>>
>> On Jun 8, 2013, at 20:45, rdl014 <rdl014@...> wrote:
>>
>>> I recently bought a nice Drake R-4B receiver and thought that I would re-tube the radio as it did seem to be a little weaker and noisier that I thought it should be. I assembled the required new tubes and proceeded to swap out the tubes and did a double check to make sure that the right tube went in the proper socket.
>>>
>>> After re-tubing, I thought I might as well adjust the notch filter as it did not seem to be doing a very good job. I had the covers off the radio and had it setting on my work desk.
>>>
>>> I turned the radio on with an external speaker connected, no antenna and the mute plug in. I was pleasantly surprised to find that the noise level from the radio was extremely low, much lower than it had been before re-tubing.
>>>
>>> As I checked to make sure all the switches were in the proper place to adjust the notch filter, I heard a loud "pop" and saw smoke coming from under the chassis, right rear beneath the area of the transformer. All lights and tubes remained on, sound stopped, but I did hurriedly turn off the receiver and unplug it.
>>>
>>> Under the chassis, I found the blown out shell of a 10 microfarad electrolytic capacitor lying on the desk. Strangely though, I do not see where it was located.
>>>
>>> Any suggestions as to where this capacitor may have been attached and if just re-tubing could have thrown enough extra stress on the capacitor to cause it to blow.
>>>
>>> Thanks and 73, Ray AK4RL
>>>
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>> [Non-text portions of this message have been removed]
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14249. Re: [DrakeRadio] price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 02:43:47 UTC
From: WB6TNF
Topic: 14242 Message: 14249

That's what happens when the U.S. Government prints money like crazy. Get used to it.

From: "yash@..." <yash@aol.com>
To: DrakeRadio@yahoogroups.com
Sent: Sunday, June 9, 2013 3:13 PM
Subject: [DrakeRadio] price for ac-4

Was looking on ebay at the drake listing,when I spotted a non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish I had 10 of the things, what a way to make money. Can't believe the prices for a simple AC-4.
dale wt4t

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[Non-text portions of this message have been removed]

14250. Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 02:51:10 UTC
From: rdl014
Topic: 14229 Message: 14250

Thanks everyone for your great help. I think I may actually have an electrolytic 10 uf capacitor here of the proper voltage.

I have as of today ordered the CD as recommended.

One other question, should I put the old tubes back in and then replace them one at a time about a day apart or how should I have gone about replacing the tubes.

Thanks and 73, Ray AK4RL
>

14251. Re: [DrakeRadio] price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 02:55:14 UTC
From: L L bahr
Topic: 14242 Message: 14251

I've bought a lot of things on Ebay over the years but am dramatically slowing down. The prices there are crazy and many tines unrealistic. In most cases I can buy the same product from fresh stock from an authorized dealer for less money then what Ebay brings in for the goods. (I'm talking about things that can be bought new today in stores). For example, I bought this week a new HP 8600e printer for less money then what they are sold for on Ebay. I bought some 6DE7 tubes from a tube dealer this week for considerably less money then they go for on Ebay and I could buy as many as I wanted to lower the shipping costs per tube. Almost any new product I buy on line from other sources is cheaper then found on Ebay. So it's been my experience Ebay is OK for one of a kind items but for anything else, you can always beat Ebay prices. (Other examples are transformers, capacitors, and resistors. I usually can buy this stuff cheaper at Mouser then from Ebay).

Lee, w0vt

----- Original Message -----

That's what happens when the U.S. Government prints money like crazy. Get used to it.

From: " yash@... " < yash@... >
To: DrakeRadio@yahoogroups.com
Sent: Sunday, June 9, 2013 3:13 PM
Subject: [DrakeRadio] price for ac-4

Was looking on ebay at the drake listing,when I spotted a non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish I had 10 of the things, what a way to make money. Can't believe the prices for a simple AC-4.
dale wt4t

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14252. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 03:00:55 UTC
From: Don Cunningham
Topic: 14229 Message: 14252

Ray, that would certainly what I would do. I only replace tubes as needed. The NOS tubes are mostly as old and as bad as the ones in the gear by now. Just my .02 though, others disagree, but I have less trouble that way, for sure.
73, smart move on the CD, it WILL save you lots of time/aggrivation,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3343 / Virus Database: 3199/6396 - Release Date: 06/09/13

[Non-text portions of this message have been removed]

14253. Re: [DrakeRadio] price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 03:01:33 UTC
From: Paul Kraemer
Topic: 14242 Message: 14253

Can't believe it either
Need to find some of those hamfests others are always talking about---you know---where the seller practically paid the buyer to haul away that gear.
Urban legend perhaps, or many years ago.
Paul K0UYA
----- Original Message -----
From: <yash@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 5:13 PM
Subject: [DrakeRadio] price for ac-4

> Was looking on ebay at the drake listing,when I spotted a
> non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish
> I had 10 of the things, what a way to make money. Can't believe the prices
> for a simple AC-4.
> dale wt4t
>
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14254. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 03:09:52 UTC
From: Richard Knoppow
Topic: 14229 Message: 14254

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 6:14 PM
Subject: Re: [DrakeRadio] Re: Let Smoke Out

> That one is an electrolytic, Richard. It's included in
> the re-cap kit from
> Hayseed.
>
> I'm suspecting with older radios that some will have caps
> that dry-out
> faster than others. I still find quite a few receivers
> with perfectly good
> electrolytics in them. I just sold an R-4 that was all
> original and there
> was no hum or other evidence of bad caps anywhere, and
> I've worked on R-4C's
> that have loads of hum / caps that have gone EOL. Could
> be if they're
> stored in an attic they dry out faster, or, who knows?
> Even use will affect
> that, I suppose.
>
> Steve Wedge, W1ES/4

That one and the filter caps are electrolytics but most of the others are not. I am still puzzled about why this cap would explode like that. If it was close to being shorted it might draw enough current through the tube to heat badly and that is probably what happened. Not good for the tube either or the output transformer.
One of the failure modes of electrolytics is that the dielectric film shrinks in thickness so the cap begins to have poor insulation.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14255. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 03:18:52 UTC
From: Richard Knoppow
Topic: 14229 Message: 14255

----- Original Message -----
From: "rdl014" <rdl014@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 7:51 PM
Subject: [DrakeRadio] Re: Let Smoke Out

> Thanks everyone for your great help. I think I may
> actually have an electrolytic 10 uf capacitor here of the
> proper voltage.
>
> I have as of today ordered the CD as recommended.
>
> One other question, should I put the old tubes back in and
> then replace them one at a time about a day apart or how
> should I have gone about replacing the tubes.
>
> Thanks and 73, Ray AK4RL
>>

Garey suggested checking the other components around
the output tube which I think is an excellent idea. The
blown cap may have caused damage or was itself caused by
something else although it might just be age.
I would restore all the original tubes. Check the
performance. If the sensitivity is low go though the
alignment procedure and see if that improves it. If its
still weak or has some other problem change one tube and see
if it makes a difference. If not put the old one back and
change another. You may have ONE weak tube and the others
good. Old tubes are somewhat of a problem. If unused they
don't change much but you usually do not know the provenance
or history. Unlike some others I am a believer in tube
testers. I think they can save a lot of grief. Even though a
tube may test marginal and still work well and one sometimes
finds tubes that test OK and don't work, most of the time
tubes that test bad _are_ bad. A good tester can find
shorted or gassy tubes or tubes with open filaments or other
major problems. They are also useful for comparing tubes.
While an emission tester is limited in its testing it can
still find tubes which are very weak even though they look
OK.
Our routine at Hewlett-Packard at the factory service
department was to routinely test all the tubes in incoming
equipment first. Much of what we got was used very heavily
and often many of the tubes were on their last legs. The

tester saved a lot of time.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14256. Re: [DrakeRadio] price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 03:22:41 UTC
From: vacuuminded2@...
Topic: 14242 Message: 14256

I think it has a lot to do with the "I want it, and I want it NOW!" mentality. Unless it is an exceedingly rare item, odds are you *will* find that item again for cheaper, down the road. IF you want to wait. Good example, the rare Drake MC-4 mobile console installed under the TR-4 in my old Impala. FINALLY found one for sale a couple years ago. The price seemed pretty high for what it is, but they are very hard to find, and he had one for sale. And I wanted it. I see another one went for something like $40 on eBay last month <facepalm>.
So YES I could have had one for much cheaper, but I wanted it, and at the time has the money to have fun with.
Not so much the case now, but I digress..

My .02

Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Jun 9, 2013, at 10:01 PM, "Paul Kraemer" <elespe@...> wrote:

> Can't believe it either
> Need to find some of those hamfests others are always talking about---you
> know---where the seller practically paid the buyer to haul away that gear.
> Urban legend perhaps, or many years ago.
> Paul K0UYA
> ----- Original Message -----
> From: <yash@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, June 09, 2013 5:13 PM
> Subject: [DrakeRadio] price for ac-4
>
> > Was looking on ebay at the drake listing,when I spotted a
> > non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish
> > I had 10 of the things, what a way to make money. Can't believe the prices
> > for a simple AC-4.
> > dale wt4t
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[Non-text portions of this message have been removed]

14257. Tube Tester

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 09:28:27 UTC
From: Howard Traxler
Topic: 14257 Message: 14257

Richard Knoppow, you brought up tube testers. What does one do if specific tubes are not on the roll chart of a tester?
Howard Traxler, WA9RYF
----- Original Message -----
From: Richard Knoppow
To: DrakeRadio@yahoogroups.com
Sent: Sunday, June 09, 2013 10:18 PM
Subject: Re: [DrakeRadio] Re: Let Smoke Out

----- Original Message -----
From: "rdl014" <rdl014@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 09, 2013 7:51 PM
Subject: [DrakeRadio] Re: Let Smoke Out

> Thanks everyone for your great help. I think I may
> actually have an electrolytic 10 uf capacitor here of the
> proper voltage.
>
> I have as of today ordered the CD as recommended.
>
> One other question, should I put the old tubes back in and
> then replace them one at a time about a day apart or how
> should I have gone about replacing the tubes.
>
> Thanks and 73, Ray AK4RL
>>

Garey suggested checking the other components around the output tube which I think is an excellent idea. The blown cap may have caused damage or was itself caused by something else although it might just be age.
I would restore all the original tubes. Check the performance. If the sensitivity is low go though the alignment procedure and see if that improves it. If its still weak or has some other problem change one tube and see if it makes a difference. If not put the old one back and change another. You may have ONE weak tube and the others good. Old tubes are somewhat of a problem. If unused they don't change much but you usually do not know the provenance or history. Unlike some others I am a believer in tube testers. I think they can save a lot of grief. Even though a tube may test marginal and still work well and one sometimes finds tubes that test OK and don't work, most of the time tubes that test bad _are_ bad. A good tester can find shorted or gassy tubes or tubes with open filaments or other

major problems. They are also useful for comparing tubes. While an emission tester is limited in its testing it can still find tubes which are very weak even though they look OK.
Our routine at Hewlett-Packard at the factory service department was to routinely test all the tubes in incoming equipment first. Much of what we got was used very heavily and often many of the tubes were on their last legs. The tester saved a lot of time.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

14258. Now, I'm scratching my head

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 11:25:26 UTC
From: Steve Wedge
Topic: 14258 Message: 14258

Morning, everyone!

Yes, I sell on eBay, and darn near anything can happen. I have to wonder about the legitimacy of this winning bid

http://www.ebay.com/itm/Nice-R-L-Drake-AC-4-AC-Power-Supply-TR-4-T-4-also-for-Collins-and-other-radios-/111082017650?ssPageName=ADME%3AB%3AEOIBUAA%3AUS%3A3160&nma=true&si=1gtTltAewapRPScj%252FujtM5pniB8%253D&orig_cvip=true&rt=nc&_trksid=p2047675.l2557

This is NOT the rare late model with the 120/240 switch, either. Just a plain-Jane AC-4!

I do wish that mine had gone for this much :-/

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14259. Re: [DrakeRadio] price for ac-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 11:35:04 UTC
From: Steve Wedge
Topic: 14242 Message: 14259

Yep.

I have a decent (but deaf) R-4C that I snagged off eBay about a month ago for $250. Bargains are out there, but you have to be patient, stick in one bid and stay with it. If you don't get this one, you may get the next one.

There are still lots of ways of making money there, but eBay has really been getting greedy. Between PayPal and eBay fees (plus now also charging on the shipping) it's nearly 15%. I just put my Buy It Now price at retail + 15% and the problem's solved.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: vacuuminded2@yahoo.com
Sent: Sunday, June 09, 2013 11:22 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] price for ac-4

I think it has a lot to do with the "I want it, and I want it NOW!" mentality. Unless it is an exceedingly rare item, odds are you *will* find that item again for cheaper, down the road. IF you want to wait. Good example, the rare Drake MC-4 mobile console installed under the TR-4 in my old Impala. FINALLY found one for sale a couple years ago. The price seemed pretty high for what it is, but they are very hard to find, and he had one for sale. And I wanted it. I see another one went for something like $40 on eBay last month <facepalm>.
So YES I could have had one for much cheaper, but I wanted it, and at the time has the money to have fun with.
Not so much the case now, but I digress..

My .02

Chris kc9ieq

Sent from my outdated iPhone wireless thingy

On Jun 9, 2013, at 10:01 PM, "Paul Kraemer" <elespe@...> wrote:

> Can't believe it either
> Need to find some of those hamfests others are always talking about---you
> know---where the seller practically paid the buyer to haul away that gear.
> Urban legend perhaps, or many years ago.
> Paul K0UYA
> ----- Original Message -----
> From: <yash@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, June 09, 2013 5:13 PM

> Subject: [DrakeRadio] price for ac-4
>
> > Was looking on ebay at the drake listing,when I spotted a
> > non upgraded AC-4, going for over 200.00 with almost 4 hours to go. I wish
> > I had 10 of the things, what a way to make money. Can't believe the prices
> > for a simple AC-4.
> > dale wt4t
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[Non-text portions of this message have been removed]

14260. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 15:02:25 UTC
From: Garey Barrell
Topic: 14229 Message: 14260

Richard -

You start out with the right attitude, but then you fall back into the 'tube tester weeds'! :-)

A properly operating radio, with a 'set' of new tubes, (a 'set' being equal to one of each TYPE,) and a little time. Replace each tube with
a 'new' one, and note if the radio works the same, better, worse, or notat all. If either of the two latter results, try another 'new'
tube'. When you find a new one thatworks 'better', leave it in there and put the old one aside. When you find one that works the same, put
the old one back in and put the 'new' one in a box marked 'tested spare'. Move on to the next tube. Repeat for each tube untilall have
been tested, and you have at least ONE 'tested spare' of each type in the box. Put the box on the shelf, and do a complete alignment of the
radio.

Now, when you have a failure of the radio, troubleshoot to find the likely faulty stage(s), and replace those tubes one at a time with your
'tested spare'. If one 'fixes' the problem, you're back in business. Plus you had the spare on hand! If not, get out the VTVM and find
the REAL problem!

My first job was at an FBO, pulling aircraft radio equipment, testing all the tubes on a REAL tube tester. Testing included Gas, Short
(while tapping), and 'life' (reducing the filament voltage by one step and noting transconductance. If it dropped more than two divisions,
replace). The KEY here is that I did a dozen or more a DAY. A lot of KING and COLLINS and some others, but a BUNCH of different radios.
The KEY words are BUNCH and DAY, plus LOT. We had a storeroom FULL of tubes, and sold a LOT. A tube tester was the only way.

However, for ONE ham, with one or even two 'stations', a set of known good spares is far more efficient. MANY of today's vintage radios used
a lot of the same tubes (especially the Mosley receiver that only used five of the SAME tube), and if you're smart and stick with Drake you
don't need a LOT of tested sparetypes!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----

> From: "rdl014" <rdl014@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Sunday, June 09, 2013 7:51 PM
> Subject: [DrakeRadio] Re: Let Smoke Out
>
>
>> Thanks everyone for your great help. I think I may
>> actually have an electrolytic 10 uf capacitor here of the
>> proper voltage.
>>
>> I have as of today ordered the CD as recommended.
>>
>> One other question, should I put the old tubes back in and
>> then replace them one at a time about a day apart or how
>> should I have gone about replacing the tubes.
>>
>> Thanks and 73, Ray AK4RL
>
> Garey suggested checking the other components around
> the output tube which I think is an excellent idea. The
> blown cap may have caused damage or was itself caused by
> something else although it might just be age.
> I would restore all the original tubes. Check the
> performance. If the sensitivity is low go though the
> alignment procedure and see if that improves it. If its
> still weak or has some other problem change one tube and see
> if it makes a difference. If not put the old one back and
> change another. You may have ONE weak tube and the others
> good. Old tubes are somewhat of a problem. If unused they
> don't change much but you usually do not know the provenance
> or history. Unlike some others I am a believer in tube
> testers. I think they can save a lot of grief. Even though a
> tube may test marginal and still work well and one sometimes
> finds tubes that test OK and don't work, most of the time
> tubes that test bad _are_ bad. A good tester can find
> shorted or gassy tubes or tubes with open filaments or other
> major problems. They are also useful for comparing tubes.
> While an emission tester is limited in its testing it can
> still find tubes which are very weak even though they look
> OK.
> Our routine at Hewlett-Packard at the factory service
> department was to routinely test all the tubes in incoming
> equipment first. Much of what we got was used very heavily
> and often many of the tubes were on their last legs. The
> tester saved a lot of time.
>

14261. Re: [DrakeRadio] Now, I'm scratching my head

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 15:14:13 UTC
From: Garey Barrell
Topic: 14258 Message: 14261

Looks to me like 'bidder' #654was a shill. Just a case of someone(s) with more $ than ?.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Morning, everyone!
>
> Yes, I sell on eBay, and darn near anything can happen. I have to wonder about the legitimacy of this winning bid
>
> http://www.ebay.com/itm/Nice-R-L-Drake-AC-4-AC-Power-Supply-TR-4-T-4-also-for-Collins-and-other-radios-/111082017650?ssPageName=ADME%3AB%3AEOIBUAA%3AUS%3A3160&nma=true&si=1gtTltAewapRPScj%252FujtM5pniB8%253D&orig_cvip=true&rt=nc&_trksid=p2047675.l2557
>
> This is NOT the rare late model with the 120/240 switch, either. Just a plain-Jane AC-4!
>
>

14262. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 15:49:48 UTC
From: <w1es1982@...>
Topic: 14229 Message: 14262

I have a TV-10 D/U. It works great but I haven't used it in over a year. Swapping is much faster.

Besides, the tester probably wouldn't have found that noisy 12BE6 I had a few months ago.

I do keep it on hand and have been thinking of making an adaptor for the 6JB6's. That would definitely be faster than having to go into the cages on the early T-4X's, where you have to remove the whole cage just to change the tubes...

Steve, W1ES/4

---- Garey Barrell <k4oah@...> wrote:
> Richard -
>
> You start out with the right attitude, but then you fall back into the 'tube tester weeds'! :-)
>
> A properly operating radio, with a 'set' of new tubes, (a 'set' being equal to one of each TYPE,) and a little time. Replace each tube with
> a 'new' one, and note if the radio works the same, better, worse, or notat all. If either of the two latter results, try another 'new'
> tube'. When you find a new one thatworks 'better', leave it in there and put the old one aside. When you find one that works the same, put
> the old one back in and put the 'new' one in a box marked 'tested spare'. Move on to the next tube. Repeat for each tube untilall have
> been tested, and you have at least ONE 'tested spare' of each type in the box. Put the box on the shelf, and do a complete alignment of the
> radio.
>
> Now, when you have a failure of the radio, troubleshoot to find the likely faulty stage(s), and replace those tubes one at a time with your
> 'tested spare'. If one 'fixes' the problem, you're back in business. Plus you had the spare on hand! If not, get out the VTVM and find
> the REAL problem!
>
> My first job was at an FBO, pulling aircraft radio equipment, testing all the tubes on a REAL tube tester. Testing included Gas, Short
> (while tapping), and 'life' (reducing the filament voltage by one step and noting transconductance. If it dropped more than two divisions,
> replace). The KEY here is that I did a dozen or more a DAY. A lot of KING and COLLINS and some others, but a BUNCH of different radios.
> The KEY words are BUNCH and DAY, plus LOT. We had a storeroom FULL of tubes, and sold a LOT. A tube tester was the only way.
>
> However, for ONE ham, with one or even two 'stations', a set of known good spares is far more efficient. MANY of today's vintage radios used

> a lot of the same tubes (especially the Mosley receiver that only used five of the SAME tube), and if you're smart and stick with Drake you
> don't need a LOT of tested sparetypes!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Richard Knoppow wrote:
> > ----- Original Message -----
> > From: "rdl014" <rdl014@...>
> > To: <DrakeRadio@yahoogroups.com>
> > Sent: Sunday, June 09, 2013 7:51 PM
> > Subject: [DrakeRadio] Re: Let Smoke Out
> > >
> > >
> > >> Thanks everyone for your great help. I think I may
> > >> actually have an electrolytic 10 uf capacitor here of the
> > >> proper voltage.
> > >>
> > >> I have as of today ordered the CD as recommended.
> > >>
> > >> One other question, should I put the old tubes back in and
> > >> then replace them one at a time about a day apart or how
> > >> should I have gone about replacing the tubes.
> > >>
> > >> Thanks and 73, Ray AK4RL
> > >
> > > Garey suggested checking the other components around
> > > the output tube which I think is an excellent idea. The
> > > blown cap may have caused damage or was itself caused by
> > > something else although it might just be age.
> > > I would restore all the original tubes. Check the
> > > performance. If the sensitivity is low go though the
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> > > still weak or has some other problem change one tube and see
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> > > change another. You may have ONE weak tube and the others
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> > > or history. Unlike some others I am a believer in tube
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> > > tube may test marginal and still work well and one sometimes
> > > finds tubes that test OK and don't work, most of the time
> > > tubes that test bad _are_ bad. A good tester can find
> > > shorted or gassy tubes or tubes with open filaments or other
> > > major problems. They are also useful for comparing tubes.

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> > still find tubes which are very weak even though they look
> > OK.
> > Our routine at Hewlett-Packard at the factory service
> > department was to routinely test all the tubes in incoming
> > equipment first. Much of what we got was used very heavily
> > and often many of the tubes were on their last legs. The
> > tester saved a lot of time.
> >
>

14263. What NOT to sub for a 6EJ7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 20:59:26 UTC
From: Steve Wedge
Topic: 14263 Message: 14263

Going through my other R-4C - the one that's deaf as a haddock.

Started swapping tubes and got to V2 (first mixer), pulled it out and noticed it looked a bit "odd".

Someone had thought they could replace a 6EJ7 with a 6EH7. When I put a 6EJ7 in V2, the receiver came alive! The S Meter is still pretty Scotch, but at least I'm on my way with this one!

BTW, the previous owner installed a couple of those entirely-too-blue LED lamps. If anyone thinks these are way too cool and wants them, I'll send them to ya for a Drake tube of your choice

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14264. Re: [DrakeRadio] What NOT to sub for a 6EJ7

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-10 21:34:22 UTC
From: William Houghton
Topic: 14263 Message: 14264

Hi Steve,

I'd like to try those lamps. I have some spare Drake tubes.

73,

Bill

From: Steve Wedge <w1es1982@...>
To: DrakeRadio@yahoogroups.com
Sent: Monday, June 10, 2013 1:59 PM
Subject: [DrakeRadio] What NOT to sub for a 6EJ7

Going through my other R-4C - the one that's deaf as a haddock.

Started swapping tubes and got to V2 (first mixer), pulled it out and noticed it looked a bit "odd".

Someone had thought they could replace a 6EJ7 with a 6EH7. When I put a 6EJ7 in V2, the receiver came alive! The S Meter is still pretty Scotch, but at least I'm on my way with this one!

BTW, the previous owner installed a couple of those entirely-too-blue LED lamps. If anyone thinks these are way too cool and wants them, I'll send them to ya for a Drake tube of your choice

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14265. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 01:39:09 UTC
From: Jim Shorney
Topic: 14229 Message: 14265

That would be of limited usefulness, as a tube tester would not test the JBs at RF. They can check just fine, even "strong" on a tester, and yet have serious falloff on 15 and 10 Meters.

73

-Jim
NU0C

On Mon, 10 Jun 2013 11:49:48 -0400, w1es1982@... wrote:

>I do keep it on hand and have been thinking of making an adaptor for the 6JB6's. That would definitely be faster than having to go into the cages on the early T-4X's, where you have to remove the whole cage just to change the tubes...

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14266. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 01:49:25 UTC
From: Steve Wedge
Topic: 14229 Message: 14266

Good point. Still, good as a go/no go.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 10, 2013, at 9:39 PM, "Jim Shorney" <jshorney@...> wrote:

>
> That would be of limited usefulness, as a tube tester would not test the JBs at
> RF. They can check just fine, even "strong" on a tester, and yet have serious
> falloff on 15 and 10 Meters.
>
> 73
>
> -Jim
> NU0C
>
> On Mon, 10 Jun 2013 11:49:48 -0400, w1es1982@... wrote:
>
> >I do keep it on hand and have been thinking of making an adaptor for the 6JB6's. That would definitely be faster than having to go into the cages on the early T-4X's, where you have to remove the whole cage just to change the tubes...
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

14267. [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 02:17:21 UTC
From: Garey Barrell
Topic: 14229 Message: 14267

Steve -

If you have a TV-7 or similar, Dan Nelson (recognized guru of TV-7 worldwide) offered a set of two adapters and a list of test setup and
quality data for about 100 different 9 and 12 pin Compactron tubes.

I bought a set about 15 years ago, and the last time I looked he was still selling them for about $20. Well worth the cost, and covers
most any Compactron you're likely to want to test.

The adapters are quite rugged and well made.

An email to Dan <djn@...> should get you the information. Please report back with what you find.!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14268. 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 03:45:54 UTC
From: w6mqi
Topic: 14268 Message: 14268

Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?

Dave

14269. Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 11:23:11 UTC
From: Steve Wedge
Topic: 14269 Message: 14269

Last week, when I posed the question about crystal reliability, there were several amongst us who mentioned the 18.1's (40m) seeming to go bad more than the others. I just got another one in this R-4C I'm working on. This one was still working but was off-frequency by 10 kHz.

I was lucky that I had a spare one.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14270. Re: [DrakeRadio] 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 11:46:39 UTC
From: Steve Wedge
Topic: 14268 Message: 14270

Dave,

If the PBT in the 2B works like those in the A- and B-Twins, it means it's time to disassemble it, clean all the congealed old grease off it and re-grease.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w6mqi
Sent: Monday, June 10, 2013 11:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] 2B Passband slipping

Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?

Dave

[Non-text portions of this message have been removed]

14271. Re: [DrakeRadio] 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 13:44:20 UTC
From: Garey Barrell
Topic: 14268 Message: 14271

Dave -

Are you sure it's not just the knob slipping on the shaft??? If it IS slipping, DO NOT just tighten the set screw!!! Until you talk to me!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
>
> Dave
>
>

14272. Re: [DrakeRadio] Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 14:06:02 UTC
From: Garey Barrell
Topic: 14269 Message: 14272

Steve -

I think it may be YOU!! :-) I can't think of anything that would make the 40M crystal more subject to failure than the others.

1. 40M is used more than the others and the crystals just 'wear out'.?

2. 18 MHz is where crystal type switches over from fundamental to overtone operation?

3. Resonance in the circuit that overdrives an 18 MHz crystal?

4. Resonance in the HC-6/U holder construction that damages the crystal?

Strangely enough, the 40M (11.0 MHz) is the most common failure crystal in the 2-A/B, so perhaps the 40M answer is the best!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Last week, when I posed the question about crystal reliability, there were several amongst us who mentioned the 18.1's (40m) seeming to go bad more than the others. I just got another one in this R-4C I'm working on. This one was still working but was off-frequency by 10 kHz.
>
> I was lucky that I had a spare one.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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>
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>
>
> [Non-text portions of this message have been removed]
>
>
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>
> Yahoo! Groups Links
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14273. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 14:47:44 UTC
From: Garey Barrell
Topic: 14229 Message: 14273

Jim -

I don't think anyone has ever explained just 'why' tube fall off in gain at high frequencies first. I've made a rudimentary search through
my books, including the 'Radiotron Designer's Handbook', and can't find any reference to it.

Assuming the first electrons that come off of the Cathode coating are the same as the last ones, the only thing that comes to mind is the
sheer number of electrons. I don't know enough about vacuum tubes to know if there is a gradual reduction in the volume of electrons, or if
they run at some level to near the end and then just run outfairly quickly.

I'm not sure WHY a 'partial' or 'reduced' stream of electrons would cause reduced gain _at high frequencies_ first??

If all this is true, HOW can a tube test 'strong' (a measure of emission?) and still have reduced gain at high frequencies?

Stupid tubes..... :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

Jim Shorney wrote:
> That would be of limited usefulness, as a tube tester would not test the JBs at
> RF. They can check just fine, even "strong" on a tester, and yet have serious
> falloff on 15 and 10 Meters.
>

14274. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 15:12:30 UTC
From: David Winfree
Topic: 14229 Message: 14274

I'm at work, just got off the phone discussing some skin depth/hall effect research. Maybe tubes can develop a skin depth issue, that manifests itself at higher frequencies initially. Either a previously conductive coating is thinner, OR a deposit of a less effective conductor is occurring.

On Tue, Jun 11, 2013 at 10:47 AM, Garey Barrell <k4oah@...>wrote:

> **
>
>
> Jim -
>
> I don't think anyone has ever explained just 'why' tube fall off in gain
> at high frequencies first. I've made a rudimentary search through
> my books, including the 'Radiotron Designer's Handbook', and can't find
> any reference to it.
>
> Assuming the first electrons that come off of the Cathode coating are the
> same as the last ones, the only thing that comes to mind is the
> sheer number of electrons. I don't know enough about vacuum tubes to know
> if there is a gradual reduction in the volume of electrons, or if
> they run at some level to near the end and then just run outfairly quickly.
>
> I'm not sure WHY a 'partial' or 'reduced' stream of electrons would cause
> reduced gain _at high frequencies_ first??
>
> If all this is true, HOW can a tube test 'strong' (a measure of emission?)
> and still have reduced gain at high frequencies?
>
> Stupid tubes....... :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> > RF. They can check just fine, even "strong" on a tester, and yet have
> serious
> > falloff on 15 and 10 Meters.

> >
>
>
>

[Non-text portions of this message have been removed]

14275. Re: [DrakeRadio] 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 15:23:44 UTC
From: Garey Barrell
Topic: 14268 Message: 14275

Dave -

If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
dries out.

Steve just recently re-did one for I think an R-4B. He would be the 'freshest' source of procedure. They ARE all the same, from the 1-A to
the R-4B, just progressively more bandwidths in later units.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

w6mqi wrote:
> Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
>
> Dave
>
>

14276. Re: [DrakeRadio] Re: Let Smoke Out

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 16:57:52 UTC
From: Paul Pollock
Topic: 14229 Message: 14276

Hi Gary,

Thought I'd pipe in. Since wavelength is a measure of frequency, it seems pretty easy to make a good guess that the physical relationship of the Anode and cathode would have a lot to say as to how efficient a given tube is at a specific frequency. It also explains why the tube makers tended towards smaller is better, where a specific tube had to work into higher and higher frequency; limited by the specifics of that particular tube design.

For example, we don't find a lot of big tubes working into the VHF spectrum (I know there are several that come to mind [4cx250, etc], but look at the internal design of those tubes and then compare their design to simpler shortwave tubes). Component distance plays a strong role in whether a tube will work at high frequencies versus low frequencies.

Basic physics works. Distance of components counts. This why transistors do better (even early on in the design history) at higher shortwaves than simple tubes (versus the compacted one <grin>). I'm not saying transistors are efficient, they're not; but because they don't have the physical size of tube parts, they aren't limited as much in frequency. Most nuvistors do a great job into the high shortwaves and VHF. Again, obviously, size and distance of components in a specific tube design is a major design consideration. Then we get into the really exotic stuff, klystrons and magnetrons,and when we look at these designs with modern eyesight, we begin to see that designers were bumping into "quantum mechanical designs", before they even had the term.

Just my 1.5 cents worth of nonsense. Have fun and good luck!

-Paul Pollock
KD7BWB
On Jun 11, 2013, at 7:47 AM, Garey Barrell wrote:

> Jim -
>
> I don't think anyone has ever explained just 'why' tube fall off in gain at high frequencies first. I've made a rudimentary search through
> my books, including the 'Radiotron Designer's Handbook', and can't find any reference to it.
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> I'm not sure WHY a 'partial' or 'reduced' stream of electrons would cause reduced gain _at high frequencies_ first??
>
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reduced gain at high frequencies?
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> Stupid tubes..... :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Jim Shorney wrote:
> > That would be of limited usefulness, as a tube tester would not test the JBs at
> > RF. They can check just fine, even "strong" on a tester, and yet have serious
> > falloff on 15 and 10 Meters.
> >
>
>

[Non-text portions of this message have been removed]

14277. [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 17:39:41 UTC
From: Garey Barrell
Topic: 14229 Message: 14277

Paul -

OK. Well as Iproved with my earlier post, I am far from expert. Your explanation makes sense froma frequency limitation due to internal
lead inductances (length) and physical sizes. Look at the acorn style tubes.! Element size and spacing is also and understandable factor
from aphysics standpoint.

WhatI'm questioning is why the (gain?) changes as the tube ages? This is most easily observed in the 6JB6 tubes used in the Drake
transmitters. They work fine when new, but as they age, the power output begins to drop, starting at 10M, working its way down to 15M and
eventually even to 20M. Some brands drop in gain fairly early in use, GE in particular comes to mind. They drop about 10W on the upper
bands very quickly, but then seem to drop at about the same rate as the RCA tubes do. So something changes pretty early in their useful
life, and it's fairly constant (just a few hours for ALL bands to drop about 10W) and then go into the 10 , 15, then 20 pattern.

I guess this is just part of the price we pay for using a tube designed to run at about 16 kHz and push it to 30 MHz! (55 MHz in the TR-6
and TC-6.)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Paul Pollock wrote:
> Hi Gary,
>
> Thought I'd pipe in. Since wavelength is a measure of frequency, it seems pretty easy to make a good guess that the physical relationship of the Anode and cathode would have a lot to say as to how efficient a given tube is at a specific frequency. It also explains why the tube makers tended towards smaller is better, where a specific tube had to work into higher and higher frequency; limited by the specifics of that particular tube design.
>
> For example, we don't find a lot of big tubes working into the VHF spectrum (I know there are several that come to mind [4cx250, etc], but look at the internal design of those tubes and then compare their design to simpler shortwave tubes). Component distance plays a strong role in whether a tube will work at high frequencies versus low frequencies.
>
> Basic physics works. Distance of components counts. This why transistors do better (even early on in the design history) at higher shortwaves than simple tubes (versus the

compacted one <grin>). I'm not saying transistors are efficient, they're not; but because they don't have the physical size of tube parts, they aren't limited as much in frequency.
> Most nuvistors do a great job into the high shortwaves and VHF. Again, obviously, size and distance of components in a specific tube design is a major design consideration. Then we get into the really exotic stuff, klystrons and magnetrons,and when we look at these designs with modern eyesight, we begin to see that designers were bumping into "quantum mechanical designs", before they even had the term.
>
> Just my 1.5 cents worth of nonsense. Have fun and good luck!
>
> -Paul Pollock
> KD7BWB
> On Jun 11, 2013, at 7:47 AM, Garey Barrell wrote:
>
>> Jim -
>>
>> I don't think anyone has ever explained just 'why' tube fall off in gain at high frequencies first. I've made a rudimentary search through
>> my books, including the 'Radiotron Designer's Handbook', and can't find any reference to it.
>>
>> Assuming the first electrons that come off of the Cathode coating are the same as the last ones, the only thing that comes to mind is the
>> sheer number of electrons. I don't know enough about vacuum tubes to know if there is a gradual reduction in the volume of electrons, or if
>> they run at some level to near the end and then just run outfairly quickly.
>>
>> I'm not sure WHY a 'partial' or 'reduced' stream of electrons would cause reduced gain _at high frequencies_ first??
>>
>> If all this is true, HOW can a tube test 'strong' (a measure of emission?) and still have reduced gain at high frequencies?
>>
>> Stupid tubes..... :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> Jim Shorney wrote:
>>> That would be of limited usefulness, as a tube tester would not test the JBs at
>>> RF. They can check just fine, even "strong" on a tester, and yet have serious
>>> falloff on 15 and 10 Meters.
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> [Non-text portions of this message have been removed]

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> Yahoo! Groups Links
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14278. Compactron Sweep Tube Adapters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 17:43:53 UTC
From: Garey Barrell
Topic: 14278 Message: 14278

Information!!!

Compactron Adapters - Set of (2) adapters which allow
single section 9 pin and 12 pin compactron sweep tubes to be tested
on TV-7 type tube testers. This lets popular tubes such as 6JB6
6JE6 6JF6 6JM6 6JS6 6JU6 6JZ6 6KD6 6KM6 6KN6 6LB6 6LF6 6LQ6 6LR6
6LX6 6ME6 6MJ6 12BJ6 20LF6 21JS6 23JS6 24JE6 27LF6 30KD6 40KD6 8950
7868 be tested on TV-7 testers which do not have compactron
sockets. The adapters are NOT suitable for multi-section
Compactrons, and is set up for sweep tubes only. Tube test setup
and test data are supplied for the TV-7 tester series only. This
includes switch settings and bias values as well as minimum and 'as
new' test values. (2) adapters as well as tube test information and
pin-out conversion data are supplied for $25 + $3.50 shipping USA.

Daniel J Nelson
<djn@...>

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14279. Re: [DrakeRadio] Compactron Sweep Tube Adapters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 18:15:49 UTC
From: VE3AX/7
Topic: 14278 Message: 14279

Good info to know Garey. Thanks!

I was recently “given” a TV-7C/u along with boxes and boxes of tubes in return for some antenna/tower work performed. These would be a nice addition.

73

Peter
VE3AX/7

From: Garey Barrell
Sent: Tuesday, June 11, 2013 10:43 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Compactron Sweep Tube Adapters

Information!!!

Compactron Adapters - Set of (2) adapters which allow
single section 9 pin and 12 pin compactron sweep tubes to be tested
on TV-7 type tube testers. This lets popular tubes such as 6JB6
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includes switch settings and bias values as well as minimum and 'as
new' test values. (2) adapters as well as tube test information and
pin-out conversion data are supplied for $25 + $3.50 shipping USA.

Daniel J Nelson
<mailto:djn%40ieee.org>

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

14280. Re: [DrakeRadio] Compactron Sweep Tube Adapters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 18:51:01 UTC
From: Mark Pilant
Topic: 14278 Message: 14280

> Compactron Adapters - Set of (2) adapters which allow single
> section 9 pin and 12 pin compactron sweep tubes to be tested
> on TV-7 type tube testers.

If you also happen to be fortunate to have either the military 1704 adapter (or the Hickok CA-5 adapter) you can also test compactron and other "odd-ball" based tubes on the TV-7. I happen to have a CA-5 which allows the switch settings for the 1704, in the TV-7 tube data, to be used.

Be aware, however, the 1704, CA-5, and CA-4 are very rare. I have only seen a couple in the last decade or so watching various places.

73

- Mark N1VQW

14281. Re: [DrakeRadio] Compactron Sweep Tube Adapters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 18:52:36 UTC
From: Richard Knoppow
Topic: 14278 Message: 14281

----- Original Message -----
From: "VE3AX/7" <ve3ax@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, June 11, 2013 11:15 AM
Subject: Re: [DrakeRadio] Compactron Sweep Tube Adapters

Good info to know Garey. Thanks!

I was recently “given” a TV-7C/u along with boxes and boxes
of tubes in return for some antenna/tower work performed.
These would be a nice addition.

73

Peter
VE3AX/7

Its very easy to make adaptors. The hardest part is
finding the Compactron sockets.
There is a great deal of information on the TV-7 at
http://jvgavila.com/tv7.htm

More at BAMA under military There are two entries for
TV-7 which contain different material.

I have two documents with additional information. One
has the settings for compactrons and the wiring information
for the adaptors for both 9 and 12 pin tubes. The other is a
spread sheet from Nolan Lee with additional material and a
chart showing actual Gm vs: TV-7 meter readings. The
settings on the two charts is somewhat different, I think
the ones on the PDF chart (with socket wiring) are correct
although both work. I will send both to you via direct
e-mail.
I find there is a definite relationship between the Gm
readings and power output.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14282. Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 19:30:38 UTC
From: w6mqi
Topic: 14268 Message: 14282

Garey
When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?

73,Dave
--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Dave -
>
> If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
> dries out.
>
> Steve just recently re-did one for I think an R-4B. He would be the 'freshest' source of procedure. They ARE all the same, from the 1-A to
> the R-4B, just progressively more bandwidths in later units.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> w6mqi wrote:
> > Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
> >
> > Dave
> >
> >
>

14283. Re: [DrakeRadio] Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 19:37:08 UTC
From: Garey Barrell
Topic: 14268 Message: 14283

Dave -

It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.

The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
knob set screw or 180? away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
knob such that the slit is at 90? to the set screw so the reducer can clamp onto the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> Garey
> When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?
>
> 73,Dave
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Dave -
>>
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>> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>

>>
>> w6mqi wrote:
>>> Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
>>>
>>> Dave
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> Yahoo! Groups Links
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14284. Re: [DrakeRadio] Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 20:09:42 UTC
From: William Houghton
Topic: 14269 Message: 14284

And I have two spare 11MHz xtals that work in my 2B.

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, June 11, 2013 7:06 AM
Subject: Re: [DrakeRadio] Those 40m crystals!

Steve -

I think it may be YOU!! :-) I can't think of anything that would make the 40M crystal more subject to failure than the others.

1. 40M is used more than the others and the crystals just 'wear out'.?

2. 18 MHz is where crystal type switches over from fundamental to overtone operation?

3. Resonance in the circuit that overdrives an 18 MHz crystal?

4. Resonance in the HC-6/U holder construction that damages the crystal?

Strangely enough, the 40M (11.0 MHz) is the most common failure crystal in the 2-A/B, so perhaps the 40M answer is the best!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<http://www.k4oah.com/>

Steve Wedge wrote:
> Last week, when I posed the question about crystal reliability, there were several amongst us who mentioned the 18.1's (40m) seeming to go bad more than the others. I just got another one in this R-4C I'm working on. This one was still working but was off-frequency by 10 kHz.
>
> I was lucky that I had a spare one.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
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14285. Re: [DrakeRadio] Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 20:12:24 UTC
From: William Houghton
Topic: 14268 Message: 14285

I think the best solution for that phenolic tube is to replace it with one of Donnie's teflon adapters.

From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, June 11, 2013 12:37 PM
Subject: Re: [DrakeRadio] Re: 2B Passband slipping

Dave -

It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.

The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
knob set screw or 180° away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
knob such that the slit is at 90° to the set screw so the reducer can clamp onto the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<http://www.k4oah.com/>

w6mqi wrote:
> Garey
> When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?
>
> 73,Dave
> --- In mailto:DrakeRadio%40yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Dave -
>>
>> If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
>> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
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>> Steve just recently re-did one for I think an R-4B. He would be the 'freshest' source of procedure. They ARE all the same, from the 1-A to
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>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> w6mqi wrote:
>>> Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
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>>> Dave
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14286. Re: [DrakeRadio] Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 20:23:29 UTC
From: Garey Barrell
Topic: 14268 Message: 14286

Bill -

Yes, Donnie's adapter works well, and is certainly a more elegant fix. Unfortunately it's considerably more expensive, both for Drake
originally and as 'aftermarket' now.

The phenolic one works just fine, as long as you know the 'secret'.! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
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>
>
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Tuesday, June 11, 2013 12:37 PM
> Subject: Re: [DrakeRadio] Re: 2B Passband slipping
>
>
> Dave -
>
> It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.
>
> The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
> 1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
> knob set screw or 180º away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
> knob such that the slit is at 90º to the set screw so the reducer can clamp onto the shaft.
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> 73, Garey - K4OAH
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>
> w6mqi wrote:
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>> 73,Dave
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>>> Dave -
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>>>>
>>>> Dave
>>>>

14287. Re: [DrakeRadio] Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-11 22:46:28 UTC
From: Steve Wedge
Topic: 14269 Message: 14287

Weird, no matter what. Maybe the usage is the answer.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, June 11, 2013 10:06 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Those 40m crystals!

Steve -

I think it may be YOU!! :-) I can't think of anything that would make the 40M crystal more subject to failure than the others.

1. 40M is used more than the others and the crystals just 'wear out'.?

2. 18 MHz is where crystal type switches over from fundamental to overtone operation?

3. Resonance in the circuit that overdrives an 18 MHz crystal?

4. Resonance in the HC-6/U holder construction that damages the crystal?

Strangely enough, the 40M (11.0 MHz) is the most common failure crystal in the 2-A/B, so perhaps the 40M answer is the best!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
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[Non-text portions of this message have been removed]

14288. Re: [DrakeRadio] Compactron Sweep Tube Adapters

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 00:19:41 UTC
From: Steve Wedge
Topic: 14278 Message: 14288

Yup - I also emailed Dan and got the info. I've told him I want to order a set. This will be useful more for matching them and as a go/no go test. Since I will have to re-tube a TR-4, this could ultimately save me money, since matched triplets are harder to find and even more expensive than matched pairs...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, June 11, 2013 1:43 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Compactron Sweep Tube Adapters

Information!!!

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single section 9 pin and 12 pin compactron sweep tubes to be tested
on TV-7 type tube testers. This lets popular tubes such as 6JB6
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6LX6 6ME6 6MJ6 12BJ6 20LF6 21JS6 23JS6 24JE6 27LF6 30KD6 40KD6 8950
7868 be tested on TV-7 testers which do not have compactron
sockets. The adapters are NOT suitable for multi-section
Compactrons, and is set up for sweep tubes only. Tube test setup
and test data are supplied for the TV-7 tester series only. This
includes switch settings and bias values as well as minimum and 'as
new' test values. (2) adapters as well as tube test information and
pin-out conversion data are supplied for $25 + $3.50 shipping USA.

Daniel J Nelson
<djn@...>

--

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

14289. Re: [DrakeRadio] Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 00:39:27 UTC
From: Steve Wedge
Topic: 14268 Message: 14289

Yep - 90 degrees is the right angle. You do need to tighten a bit more than the other knobs, but not a whole lot.

You should remove the knob from the shaft, then remove the back off the PBT box, gently remove the disc and shaft assembly and then the slug rack. You will find a spring on the front. There will be grease around the disc and both the bearing surface of the slug rack (small convex "button" and the adjuster on the back cover. Clean all this grease off with IPA (Isopropyl alcohol, not India Pale Ale)

Re-grease the disc, the front of the slug rack shaft and the front and rear buttons. You can use regular all-purpose grease or moly grease. Some folks have even used lithium grease but I'm not certain how long that would hold up.

Put everything back together in reverse sequence of removal. You will need to gently nudge each slug into its tube. After you get everything back together, try it out. After you confirm that it's working properly, re-solder the rear cover in the same places it was soldered before.

Sticking PBT can be due to the slug rack binding up on its shaft (the hollow tube that the slug rack rides on), so it's important that you put a light coating of grease on that shaft.

It's really a fairly simple procedure and once you've done it, you won't believe that you were once intimidated by it.

BTW, don't try to adjust the slug positions when the rack is out of the radio. You should, however, make sure that each slug can rotate within its plastic sleeve, as it's easy to hold that sleeve with needle-nose pliers while turning the slug. Just make sure you put the slug back in the same position it was in prior to moving it.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, June 11, 2013 3:37 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: 2B Passband slipping

Dave -

It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.

The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
knob set screw or 180º away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
knob such that the slit is at 90º to the set screw so the reducer can clamp onto the shaft.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

w6mqi wrote:
> Garey
> When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?
>
> 73,Dave
> --- In DrakeRadio@...m, Garey Barrell <k4oah@...> wrote:
>> Dave -
>>
>> If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
>> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
>> dries out.
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>> Steve just recently re-did one for I think an R-4B. He would be the 'freshest' source of procedure. They ARE all the same, from the 1-A to
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>> 73, Garey - K4OAH
>> Glen Allen, VA
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>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
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>> w6mqi wrote:
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>>>
>>> Dave

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[Non-text portions of this message have been removed]

14290. TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 00:45:45 UTC
From: Steve Wedge
Topic: 14290 Message: 14290

Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?

I know it should be possible but don't want to spend days trying to arrive at the settings.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14291. Re: Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 01:02:41 UTC
From: fred
Topic: 14269 Message: 14291

Its not Steve .
Murphy strikes again .
kd5pnt

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Steve -
>
> I think it may be YOU!! :-) I can't think of anything that would make the 40M crystal more subject to failure than the others.
>
> 1. 40M is used more than the others and the crystals just 'wear out'.?
>
> 2. 18 MHz is where crystal type switches over from fundamental to overtone operation?
>
> 3. Resonance in the circuit that overdrives an 18 MHz crystal?
>
> 4. Resonance in the HC-6/U holder construction that damages the crystal?
>
> Strangely enough, the 40M (11.0 MHz) is the most common failure crystal in the 2-A/B, so perhaps the 40M answer is the best!!
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
> > Last week, when I posed the question about crystal reliability, there were several amongst us who mentioned the 18.1's (40m) seeming to go bad more than the others. I just got another one in this R-4C I'm working on. This one was still working but was off-frequency by 10 kHz.
> >
> > I was lucky that I had a spare one.
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
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> > [Non-text portions of this message have been removed]
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14292. Re: [DrakeRadio] Those 40m crystals!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 01:23:33 UTC
From: Jim Shorney
Topic: 14269 Message: 14292

Sunspots

Aliens

Mold

Genetically modified crystal (GMC)

Global warming

The man on the grassy knoll

Who knows? At least, maybe Garey believes me now!

73

-Jim
NU0C

On Tue, 11 Jun 2013 18:46:28 -0400, Steve Wedge wrote:

>Weird, no matter what. Maybe the usage is the answer.
>
>
>Steve Wedge, W1ES/4
>
>Time flies like an arrow; fruit flies like a banana.
>
>
>All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
>From: Garey Barrell
>Sent: Tuesday, June 11, 2013 10:06 AM
>To: DrakeRadio@yahoogroups.com
>Subject: Re: [DrakeRadio] Those 40m crystals!
>
>
>
>Steve -
>
>I think it may be YOU!! :-) I can't think of anything that would make the 40M crystal more subject to failure than the others.
>
>1. 40M is used more than the others and the crystals just 'wear out'.?
>

>2. 18 MHz is where crystal type switches over from fundamental to overtone operation?
>
>3. Resonance in the circuit that overdrives an 18 MHz crystal?
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>4. Resonance in the HC-6/U holder construction that damages the crystal?
>
>Strangely enough, the 40M (11.0 MHz) is the most common failure crystal in the 2-A/B, so perhaps the 40M answer is the best!!
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>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
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>> [Non-text portions of this message have been removed]
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750,
IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn
for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14293. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 01:38:51 UTC
From: Jim Shorney
Topic: 14229 Message: 14293

On Tue, 11 Jun 2013 13:39:41 -0400, Garey Barrell wrote:

>WhatI'm questioning is why the (gain?) changes as the tube ages? This is most easily observed in the 6JB6 tubes used in the Drake
>transmitters. They work fine when new, but as they age, the power output begins to drop, starting at 10M, working its way down to 15M and
>eventually even to 20M.

One theory I've heard is it is due to sagging of the internal elements with use (abuse), altering the internal geometry and interelectrode capacitances. One would think this would show up also as drift in the neutralization adjustment? It kind of makes sense when thinking that these tube are designed for pulse operation, and even SSB and CW may be higher duty cycle than the designers intended.

Or it's a conspiracy to engineer obsolescence and get us to buy new tubes more often...

73

-Jim
NU0C

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14294. Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 01:45:18 UTC
From: w6mqi
Topic: 14268 Message: 14294

Steve
Good information I've added it to my Drake reference files. Well I got lucky I pulled the phenolic tube out of the knob and rotated it so the set screw had a new spot to press against. Then re-tightened the set screw a little bit tighter this time and it seems to work now. The whole PTO seems a bit stiff tough I may end up taking apart the PTO and do a lube job later on. Right now I have too many irons in the fire I need to finish the Hallicrafters SX-28 first.

Thanks guys
73,Dave

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Yep - 90 degrees is the right angle. You do need to tighten a bit more than the other knobs, but not a whole lot.
>
> You should remove the knob from the shaft, then remove the back off the PBT box, gently remove the disc and shaft assembly and then the slug rack. You will find a spring on the front. There will be grease around the disc and both the bearing surface of the slug rack (small convex "button" and the adjuster on the back cover. Clean all this grease off with IPA (Isopropyl alcohol, not India Pale Ale)
>
> Re-grease the disc, the front of the slug rack shaft and the front and rear buttons. You can use regular all-purpose grease or moly grease. Some folks have even used lithium grease but I'm not certain how long that would hold up.
>
> Put everything back together in reverse sequence of removal. You will need to gently nudge each slug into its tube. After you get everything back together, try it out. After you confirm that it's working properly, re-solder the rear cover in the same places it was soldered before.
>
> Sticking PBT can be due to the slug rack binding up on its shaft (the hollow tube that the slug rack rides on), so it's important that you put a light coating of grease on that shaft.
>
> It's really a fairly simple procedure and once you've done it, you won't believe that you were once intimidated by it.
>
> BTW, don't try to adjust the slug positions when the rack is out of the radio. You should, however, make sure that each slug can rotate within its plastic sleeve, as it's easy to hold that sleeve with needle-nose pliers while turning the slug. Just make sure you put the slug back in the same position it was in prior to moving it.
>
> 73,
>

> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Tuesday, June 11, 2013 3:37 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: 2B Passband slipping
>
>
>
> Dave -
>
> It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.
>
> The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
> 1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
> knob set screw or 180º away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
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>
> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> <www.k4oah.com>
>
> w6mqi wrote:
> > Garey
> > When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?
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> > 73,Dave
> > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
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> >> If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
> >> cam system, and are returned by spring loading. The grease Drake used appears to be

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> >>>
> >>> Dave
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14295. Re: [DrakeRadio] Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 02:13:56 UTC
From: Steve Wedge
Topic: 14268 Message: 14295

An SX-28. I had two of those beasts and I was going to restore them and never did. Sold them at Hosstraders just before I pulled up stakes and moved to NC. A pity - I really wanted to have one.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w6mqi
Sent: Tuesday, June 11, 2013 9:45 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: 2B Passband slipping

Steve
Good information I've added it to my Drake reference files. Well I got lucky I pulled the phenolic tube out of the knob and rotated it so the set screw had a new spot to press against. Then re-tightened the set screw a little bit tighter this time and it seems to work now. The whole PTO seems a bit stiff tough I may end up taking apart the PTO and do a lube job later on. Right now I have too many irons in the fire I need to finish the Hallicrafters SX-28 first.

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>
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> Put everything back together in reverse sequence of removal. You will need to gently nudge each slug into its tube. After you get everything back together, try it out. After you confirm that it's working properly, re-solder the rear cover in the same places it was soldered before.
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> From: Garey Barrell
> Sent: Tuesday, June 11, 2013 3:37 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Re: 2B Passband slipping
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>
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> >> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
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14296. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 02:22:46 UTC
From: Garey Barrell
Topic: 14290 Message: 14296

Steve -

Dan says his data is for the TV-7/xU only.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?
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14297. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 02:33:29 UTC
From: Garey Barrell
Topic: 14229 Message: 14297

Just when I'm beginning to think you might know what you're talking about, you come up with THIS cockamamie story!! Sagging elements!??!
They ain't female.....!

It doesseem it would alter the neutralization. I don't recall ever having to change neutralization on an unmolested set of finals. Course
we ARE talking pretty close tolerances to get the gain they get.

Not really pulse operation, they run at 15734 some Hz (There was a day when I could HEAR that frequency) and typically ran inside a closed
box with 20 other tubes, ALL DAY in many homes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> On Tue, 11 Jun 2013 13:39:41 -0400, Garey Barrell wrote:
>
>> WhatI'm questioning is why the (gain?) changes as the tube ages? This is most easily observed in the 6JB6 tubes used in the Drake
>> transmitters. They work fine when new, but as they age, the power output begins to drop, starting at 10M, working its way down to 15M and
>> eventually even to 20M.
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> One theory I've heard is it is due to sagging of the internal elements with use
> (abuse), altering the internal geometry and interelectrode capacitances. One
> would think this would show up also as drift in the neutralization adjustment?
> It kind of makes sense when thinking that these tube are designed for pulse
> operation, and even SSB and CW may be higher duty cycle than the designers
> intended.
>
> Or it's a conspiracy to engineer obsolescence and get us to buy new tubes more
> often...
>

14298. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 03:12:43 UTC
From: Ian Wilson
Topic: 14229 Message: 14298

Yes, I can remember being able to hear line output frequency zinging
from a happy TV. These days I can still hear tones OK but have some
trouble listening, apparently....

I would think the major cause of dropoff in tube performance is the
emissivity of the cathode. I would be really surprised if the geometry
changed much over the years (apart from grids falling into plates, etc).

I haven't done any kind of formal study but when I have tested a number
of tubes on my emission tester, the ones that passed the highest current
were the liveliest RF output tubes. Of course, I have no way to tell if that
is correlated with age, is production spread, or the result of a hard life.

73, ian K3IMW

On Tue, Jun 11, 2013 at 7:33 PM, Garey Barrell <k4oah@...> wrote:

> **
>
>
> Just when I'm beginning to think you might know what you're talking about,
> you come up with THIS cockamamie story!! Sagging elements!??!
> They ain't female........!
>
> It doesseem it would alter the neutralization. I don't recall ever having
> to change neutralization on an unmolested set of finals. Course
> we ARE talking pretty close tolerances to get the gain they get.
>
> Not really pulse operation, they run at 15734 some Hz (There was a day
> when I could HEAR that frequency) and typically ran inside a closed
> box with 20 other tubes, ALL DAY in many homes.
>
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Jim Shorney wrote:
> > On Tue, 11 Jun 2013 13:39:41 -0400, Garey Barrell wrote:
> >
> >> WhatI'm questioning is why the (gain?) changes as the tube ages? This
> is most easily observed in the 6JB6 tubes used in the Drake
> >> transmitters. They work fine when new, but as they age, the power

> output begins to drop, starting at 10M, working its way down to 15M and
> >> eventually even to 20M.
> >
> > One theory I've heard is it is due to sagging of the internal elements
> with use
> > (abuse), altering the internal geometry and interelectrode capacitances.
> One
> > would think this would show up also as drift in the neutralization
> adjustment?
> > It kind of makes sense when thinking that these tube are designed for
> pulse
> > operation, and even SSB and CW may be higher duty cycle than the
> designers
> > intended.
> >
> > Or it's a conspiracy to engineer obsolescence and get us to buy new
> tubes more
> > often...
> >
>
>
>

[Non-text portions of this message have been removed]

14299. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 03:24:49 UTC
From: Jim Shorney
Topic: 14229 Message: 14299

On Tue, 11 Jun 2013 22:33:29 -0400, Garey Barrell wrote:

>Just when I'm beginning to think you might know what you're talking about, you come up with THIS cockamamie story!! Sagging elements!??!
>They ain't female.....!

Hey, don't shoot the messenger! :P I didn't come up with it, I read it somewhere. And you know that everything your read on the internet is true, right?

>Not really pulse operation, they run at 15734 some Hz (There was a day when I could HEAR that frequency) and typically ran inside a closed
>box with 20 other tubes, ALL DAY in many homes.

My mom used to think I was hearing things when I would tell her that I could hear whine from the TV. I'm still thinking that the horizontal sawtooth was a fairly low duty cycle. I could be wrong. Google is not helping me tonight.

Must be the sunspots...

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14300. Well I went and done did it again.. New addition to the Drake family

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 03:37:07 UTC
From: vacuuminded2@...
Topic: 14300 Message: 14300

Well, a homeless TR-7, PS, and MN-7 followed me home tonight, couldn't help but to let them in and make themselves at home. It's now a saltine cracker and hot-pockets diet for me!

Any advice on things to check or replace as preventative maintenance before attempting to power it up? May have been sitting for 10yrs.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

14301. Re: 2B Passband slipping

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 03:37:56 UTC
From: w6mqi
Topic: 14268 Message: 14301

Steve
As much as I like Drake radios the Hallicrafters SX-28 has to be one of the nicest looking receivers ever made. Mine is a low serial number H-116268 with matching Jensen speaker. The unit has been completely recapped and just needs a little tweaking to bring the old girl back to full working order. Also thinking of building a reproduction R-12 speaker console for the SX-28 can't wait!

73,Dave

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> An SX-28. I had two of those beasts and I was going to restore them and never did. Sold them at Hosstraders just before I pulled up stakes and moved to NC. A pity - I really wanted to have one.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: w6mqi
> Sent: Tuesday, June 11, 2013 9:45 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] Re: 2B Passband slipping
>
>
>
> Steve
> Good information I've added it to my Drake reference files. Well I got lucky I pulled the phenolic tube out of the knob and rotated it so the set screw had a new spot to press against. Then re-tightened the set screw a little bit tighter this time and it seems to work now. The whole PTO seems a bit stiff tough I may end up taking apart the PTO and do a lube job later on. Right now I have too many irons in the fire I need to finish the Hallicrafters SX-28 first.
>
> Thanks guys
> 73,Dave
>
> --- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@> wrote:
> >
> > Yep - 90 degrees is the right angle. You do need to tighten a bit more than the other

knobs, but not a whole lot.
> >
> > You should remove the knob from the shaft, then remove the back off the PBT box, gently remove the disc and shaft assembly and then the slug rack. You will find a spring on the front. There will be grease around the disc and both the bearing surface of the slug rack (small convex "button" and the adjuster on the back cover. Clean all this grease off with IPA (Isopropyl alcohol, not India Pale Ale)
> >
> > Re-grease the disc, the front of the slug rack shaft and the front and rear buttons. You can use regular all-purpose grease or moly grease. Some folks have even used lithium grease but I'm not certain how long that would hold up.
> >
> > Put everything back together in reverse sequence of removal. You will need to gently nudge each slug into its tube. After you get everything back together, try it out. After you confirm that it's working properly, re-solder the rear cover in the same places it was soldered before.
> >
> > Sticking PBT can be due to the slug rack binding up on its shaft (the hollow tube that the slug rack rides on), so it's important that you put a light coating of grease on that shaft.
> >
> > It's really a fairly simple procedure and once you've done it, you won't believe that you were once intimidated by it.
> >
> > BTW, don't try to adjust the slug positions when the rack is out of the radio. You should, however, make sure that each slug can rotate within its plastic sleeve, as it's easy to hold that sleeve with needle-nose pliers while turning the slug. Just make sure you put the slug back in the same position it was in prior to moving it.
> >
> > 73,
> >
> > Steve Wedge, W1ES/4
> >
> > Time flies like an arrow; fruit flies like a banana.
> >
> >
> > All my computers have my signature with various pearls of wisdom appended thereto.
> >
> >
> >
> > From: Garey Barrell
> > Sent: Tuesday, June 11, 2013 3:37 PM
> > To: DrakeRadio@yahoogroups.com
> > Subject: Re: [DrakeRadio] Re: 2B Passband slipping
> >
> >
> >
> > Dave -
> >
> > It's been a while since I've done one, but I believe it just pulls off. Steve could tell you for sure.

> >
> > The Passband Tuning knob is prone to slippage. It's a1/8" dia shaft, and has a phenolic tube that is 1/8" id, 1/4" od as a reducer for the
> > 1/4" knob. The trick is that the tube has a longitudinal slit cutin it. If the reducer is installed with the slit either aligned with the
> > knob set screw or 180º away from it, you can tighten the set screw until the knob splits and it will still slip. The reducer must be in the
> > knob such that the slit is at 90º to the set screw so the reducer can clamp onto the shaft.
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> > Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > and TR-4/C Service Supplement CDs
> > <www.k4oah.com>
> >
> > w6mqi wrote:
> > > Garey
> > > When I get home tonight I'll check the knob but I'am pretty sure it's somewhere inside the PTO that is slipping. How do I get the filter selector switch off so I can pull the PTO out?
> > >
> > > 73,Dave
> > > --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@> wrote:
> > >> Dave -
> > >>
> > >> If you have determined that the knob is NOT slipping, you will have to remove and open the Passband Tuner. The slugs are pushed out by a
> > >> cam system, and are returned by spring loading. The grease Drake used appears to be wheel bearing grease, same as used on PTO bearings, and
> > >> dries out.
> > >>
> > >> Steve just recently re-did one for I think an R-4B. He would be the 'freshest' source of procedure. They ARE all the same, from the 1-A to
> > >> the R-4B, just progressively more bandwidths in later units.
> > >>
> > >> 73, Garey - K4OAH
> > >> Glen Allen, VA
> > >>
> > >> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> > >> and TR-4/C Service Supplement CDs
> > >> <www.k4oah.com>
> > >>
> > >> w6mqi wrote:
> > >>> Just noticed on my 2B when I turn the passband knob nothing happens the passband coils no longer move in or out the mechanism seems to be slipping some where inside the passband unit. So to see what's going on inside I need to remove the passband unit from the radio. How do I remove the filter selector arm attached to the outside shaft of the passband unit? It appears solder to the outside brass shaft which also has a "C" clip up

next to the filter switch does this clip come off to allow the filter switch shaft to slide through the front panel for removal?
> > >>>
> > >>> Dave
> > >>>
> > >>>
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > Yahoo! Groups Links
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> > [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
>

14302. Re: [DrakeRadio] Well I went and done did it again.. New addition to the Drake family

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 04:49:04 UTC
From: Jim Shorney
Topic: 14300 Message: 14302

Search the online archives of this group and the Drakelist reflector. There's too much general info to repeat. As for powering it up, just plug it in and turn it on. If there are fans, you might want to blow the dust out first. If no fans, you should add them.

73

-Jim
NU0C

On Tue, 11 Jun 2013 22:37:07 -0500, vacuuminded2@... wrote:

>Well, a homeless TR-7, PS, and MN-7 followed me home tonight, couldn't help but to let them in and make themselves at home. It's now a saltine cracker and hot-pockets diet for me!
>
>Any advice on things to check or replace as preventative maintenance before attempting to power it up? May have been sitting for 10yrs.
>
>Regards,
>Chris kc9ieq

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14303. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 11:31:12 UTC
From: Steve Wedge
Topic: 14290 Message: 14303

Yeah, I know - I asked him. I was wondering if anyone on here had converted the settings. There's no reason why it wouldn't work, it's just finding the right settings.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, June 11, 2013 10:22 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Steve -

Dan says his data is for the TV-7/xU only.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?
>
> I know it should be possible but don't want to spend days trying to arrive at the settings.
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
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> ------------------------------------

>
> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14304. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 11:35:35 UTC
From: Steve Wedge
Topic: 14229 Message: 14304

Not being a physicist or anything, the most probable mechanism to me would be loss of cathode emission.

It would be interesting to see if anyone else has noted changes in settings (LOAD and DRIVE, in particular) as the tube ages. Could it be that we have to drive them harder and the lower bands are just more efficient? In other words, we're driving them harder on 80m as well, but there's more "headroom" in the circuit...

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Tuesday, June 11, 2013 10:33 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Just when I'm beginning to think you might know what you're talking about, you come up with THIS cockamamie story!! Sagging elements!??!
They ain't female.....!

It doesseem it would alter the neutralization. I don't recall ever having to change neutralization on an unmolested set of finals. Course
we ARE talking pretty close tolerances to get the gain they get.

Not really pulse operation, they run at 15734 some Hz (There was a day when I could HEAR that frequency) and typically ran inside a closed
box with 20 other tubes, ALL DAY in many homes.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> On Tue, 11 Jun 2013 13:39:41 -0400, Garey Barrell wrote:
>
>> WhatI'm questioning is why the (gain?) changes as the tube ages? This is most easily observed in the 6JB6 tubes used in the Drake
>> transmitters. They work fine when new, but as they age, the power output begins to drop, starting at 10M, working its way down to 15M and
>> eventually even to 20M.
>
> One theory I've heard is it is due to sagging of the internal elements with use

> (abuse), altering the internal geometry and interelectrode capacitances. One
> would think this would show up also as drift in the neutralization adjustment?
> It kind of makes sense when thinking that these tube are designed for pulse
> operation, and even SSB and CW may be higher duty cycle than the designers
> intended.
>
> Or it's a conspiracy to engineer obsolescence and get us to buy new tubes more
> often...
>

[Non-text portions of this message have been removed]

14305. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 12:45:30 UTC
From: Gary Woods
Topic: 14229 Message: 14305

On Tue, 11 Jun 2013 22:24:49 -0500, you wrote:

> I'm still thinking that the horizontal sawtooth was a
>fairly low duty cycle.

It's a pretty low duty cycle, because the H-output only fires a short
"flyback" pulse to kick the beam back to the start of the next scan line;
the inductance of the deflection yoke integrates it into the deflection
ramp.
A friend who is a physicist used to ask tech applicants if he had a nuclear
accelerator in his office. Most had no idea the CRT TV qualified...

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

14306. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 13:08:56 UTC
From: Bernie
Topic: 14229 Message: 14306

Jim,.
Back in 1971-73 I worked as control board operator and transmitter engineer at a TV station with 10 black & white monitors right in front of me at arms length. If I thought about it, I could hear the high pitched frequency, but when it REALLY would show up was after an 8 hour shift when I was home, in bed and totally quiet. I think eventually that damn high pitched tone burned out those little hairs in my ears and today I can't hear above 12,000 hz.
I absolutely refuse to have a dental assistant use ultrasonic tools to clean my teeth...the sound goes right to the center of my brain!

Bernie in ND
WD0GMD

----- Original Message -----
From: Jim Shorney
To: DrakeRadio@yahoogroups.com
Sent: Tuesday, June 11, 2013 10:24 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

On Tue, 11 Jun 2013 22:33:29 -0400, Garey Barrell wrote:

>Just when I'm beginning to think you might know what you're talking about, you come up with THIS cockamamie story!! Sagging elements!??!
>They ain't female........!

Hey, don't shoot the messenger! :P I didn't come up with it, I read it somewhere. And you know that everything your read on the internet is true, right?

>Not really pulse operation, they run at 15734 some Hz (There was a day when I could HEAR that frequency) and typically ran inside a closed
>box with 20 other tubes, ALL DAY in many homes.

My mom used to think I was hearing things when I would tell her that I could hear whine from the TV. I'm still thinking that the horizontal sawtooth was a fairly low duty cycle. I could be wrong. Google is not helping me tonight.

Must be the sunspots...

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

[Non-text portions of this message have been removed]

14307. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 13:33:47 UTC
From: Barry
Topic: 14229 Message: 14307

Well now, you, too, can become an audiologist. :)

http://www.phys.unsw.edu.au/jw/hearing.html

Barry - N4BUQ

----- Original Message -----
> From: "Bernie" <barcand@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Wednesday, June 12, 2013 8:08:56 AM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
> Jim,.
> Back in 1971-73 I worked as control board operator and transmitter
> engineer at a TV station with 10 black & white monitors right in
> front of me at arms length. If I thought about it, I could hear the
> high pitched frequency, but when it REALLY would show up was after
> an 8 hour shift when I was home, in bed and totally quiet. I think
> eventually that damn high pitched tone burned out those little hairs
> in my ears and today I can't hear above 12,000 hz.
> I absolutely refuse to have a dental assistant use ultrasonic tools
> to clean my teeth...the sound goes right to the center of my brain!
>
> Bernie in ND
> WD0GMD

14308. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 13:35:53 UTC
From: Garey Barrell
Topic: 14229 Message: 14308

Ian -

Thanks Ian. Well that's the obvious answer, but I'd like for someone to explain the 'why' of it. Do MORE electrons have to make the trip
from the Cathode to the Plate for higher frequencies. Do the electrons have to be closer together for the higher frequencies? Does it
require more 'collisions' during the trip?? Something akin to 'skin effect' or ??? Do UHF tubes require bigger, more active Cathode coatings?

I know there's a reason, but so far I haven't been able to figure (or find) it out!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Ian Wilson wrote:
> Yes, I can remember being able to hear line output frequency zinging
> from a happy TV. These days I can still hear tones OK but have some
> trouble listening, apparently....
>
> I would think the major cause of dropoff in tube performance is the
> emissivity of the cathode. I would be really surprised if the geometry
> changed much over the years (apart from grids falling into plates, etc).
>
> I haven't done any kind of formal study but when I have tested a number
> of tubes on my emission tester, the ones that passed the highest current
> were the liveliest RF output tubes. Of course, I have no way to tell if that
> is correlated with age, is production spread, or the result of a hard life.
>
> 73, ian K3IMW
>
>
>
> On Tue, Jun 11, 2013 at 7:33 PM, Garey Barrell <k4oah@...> wrote:
>
>> **
>>
>>
>> Just when I'm beginning to think you might know what you're talking about,
>> you come up with THIS cockamamie story!! Sagging elements!??!
>> They ain't female.....!
>>
>> It doesseem it would alter the neutralization. I don't recall ever having

>> to change neutralization on an unmolested set of finals. Course
>> we ARE talking pretty close tolerances to get the gain they get.
>>
>> Not really pulse operation, they run at 15734 some Hz (There was a day
>> when I could HEAR that frequency) and typically ran inside a closed
>> box with 20 other tubes, ALL DAY in many homes.
>>
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Jim Shorney wrote:
>>> On Tue, 11 Jun 2013 13:39:41 -0400, Garey Barrell wrote:
>>>
>>>> WhatI'm questioning is why the (gain?) changes as the tube ages? This
>> is most easily observed in the 6JB6 tubes used in the Drake
>>>> transmitters. They work fine when new, but as they age, the power
>> output begins to drop, starting at 10M, working its way down to 15M and
>>>> eventually even to 20M.
>>> One theory I've heard is it is due to sagging of the internal elements
>> with use
>>> (abuse), altering the internal geometry and interelectrode capacitances.
>> One
>>> would think this would show up also as drift in the neutralization
>> adjustment?
>>> It kind of makes sense when thinking that these tube are designed for
>> pulse
>>> operation, and even SSB and CW may be higher duty cycle than the
>> designers
>>> intended.
>>>
>>> Or it's a conspiracy to engineer obsolescence and get us to buy new
>> tubes more
>>> often...
>>>

14309. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 13:39:11 UTC
From: Garey Barrell
Topic: 14229 Message: 14309

Jim -

It's the horizontal sweep signal, so there is a very brief 'retrace' time, but otherwise each horizontal line is a tooth in that saw.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> On Tue, 11 Jun 2013 22:33:29 -0400, Garey Barrell wrote:
>
>> Just when I'm beginning to think you might know what you're talking about, you come up with THIS cockamamie story!! Sagging elements!??!
>> They ain't female........!
>
> Hey, don't shoot the messenger! :P I didn't come up with it, I read it
> somewhere. And you know that everything your read on the internet is true,
> right?
>
>
>> Not really pulse operation, they run at 15734 some Hz (There was a day when I could HEAR that frequency) and typically ran inside a closed
>> box with 20 other tubes, ALL DAY in many homes.
>
> My mom used to think I was hearing things when I would tell her that I could
> hear whine from the TV. I'm still thinking that the horizontal sawtooth was a
> fairly low duty cycle. I could be wrong. Google is not helping me tonight.
>
> Must be the sunspots...
>

14310. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 03:46:07 UTC
From: R PRECHTL K7DFW
Topic: 14229 Message: 14310

Hey, don't shoot the messenger! :P I didn't come up with it, I read it somewhere.

You may have seen it on this Drake page.

http://www.zerobeat.net/drakelist/fans.html
Submitted by Gerald LeMay - W1ID

In part: "Another problem occurs when the tube elements themselves become softer and sag due to
excessive heat during excessively long duty cycles."

K7DFW

..._._

14311. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 13:47:19 UTC
From: Garey Barrell
Topic: 14290 Message: 14311

I don't know anything about the 'other' models, but do they have the same button set-up?? Some of the tests you have to push and hold one
button, then press another??I would think the element switches would be the same??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Yeah, I know - I asked him. I was wondering if anyone on here had converted the settings. There's no reason why it wouldn't work, it's just finding the right settings.
>
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Tuesday, June 11, 2013 10:22 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors
>
>
>
> Steve -
>
> Dan says his data is for the TV-7/xU only.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
>> Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?

>>
>> I know it should be possible but don't want to spend days trying to arrive at the settings.
>>

14312. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:00:18 UTC
From: Steve Wedge
Topic: 14290 Message: 14312

That's what I'm thinking. I need to find the manual for the TV-7...

Will let you know what I find. It's more a matter of getting a setting that produces a consistent reading with a known-good tube. It's even really not important what the actual number is if all you're doing is matching them.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, June 12, 2013 9:47 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

I don't know anything about the 'other' models, but do they have the same button set-up??
Some of the tests you have to push and hold one
button, then press another??I would think the element switches would be the same??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Steve Wedge wrote:
> Yeah, I know - I asked him. I was wondering if anyone on here had converted the settings. There's no reason why it wouldn't work, it's just finding the right settings.
>
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Tuesday, June 11, 2013 10:22 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors
>

>
>
> Steve -
>
> Dan says his data is for the TV-7/xU only.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
>> Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?
>>
>> I know it should be possible but don't want to spend days trying to arrive at the settings.
>>

[Non-text portions of this message have been removed]

14313. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:02:45 UTC
From: Garey Barrell
Topic: 14229 Message: 14313

OK, yes I remember seeing that some years ago. I think it's generally correct, but I don't accept the 'droopy elements', yet...! :-)

Exhausting hot air from the area of the PA DOES extend tube life, indicating that the failure is most likely temperature related.

I still believe that neutralization would be affected, and so far I've not run into that. When I get a 'new' radio and check the power
output, if it's low on 10M I check neutralization first. A couple of times neutralization was off, but not always, yet tubes were 'weak' at RF.

This may be as close as we're going to get! Not too many tube design engineers still around......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

R PRECHTL K7DFW wrote:
> Hey, don't shoot the messenger! :P I didn't come up with it, I read it somewhere.
>
>
> ---
> ---
>
> You may have seen it on this Drake page.
>
> http://www.zerobeat.net/drakelist/fans.html
> Submitted by Gerald LeMay - W1ID
>
> In part: "Another problem occurs when the tube elements themselves become softer and sag due to
> excessive heat during excessively long duty cycles."
>
>
>

14314. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:18:38 UTC
From: Steve Wedge
Topic: 14290 Message: 14314

I found manuals on BAMA. Unfortunately, the military used photographs that did not reproduce well. I'll have to dive into reading them to see what correlates.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Wednesday, June 12, 2013 9:47 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

I don't know anything about the 'other' models, but do they have the same button set-up??
Some of the tests you have to push and hold one
button, then press another??I would think the element switches would be the same??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Steve Wedge wrote:
> Yeah, I know - I asked him. I was wondering if anyone on here had converted the settings. There's no reason why it wouldn't work, it's just finding the right settings.
>
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> From: Garey Barrell
> Sent: Tuesday, June 11, 2013 10:22 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors
>
>
>
> Steve -

>
> Dan says his data is for the TV-7/xU only.
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> 73, Garey - K4OAH
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> Steve Wedge wrote:
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>>
>> I know it should be possible but don't want to spend days trying to arrive at the settings.
>>

[Non-text portions of this message have been removed]

14315. Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:19:42 UTC
From: Garey Barrell
Topic: 14290 Message: 14315

Steve -

"Matching" PA tubes is more a matter of matching grid sensitivity rather than absolute gain.

Drake 'matched' by setting Grid voltage at a fixed level, and then grading tubes by the idle current they drew at that voltage. "Matched"
sets were those that idled within 5 mA of each other at any fixed voltage.

Easy to do in the transmitter, just set idle current for 30 mA with a single tube, and then replace one at a time without readjusting BIAS
supply. Select two, or three, that are closest to the same idle current.

Dan's test data shows the BIAS that resulted in 100 with a 'new' tube, and then the 'maximum' found in a group of tubes, usually 5-15 points
higher. There is a 'MIN' value, about 50 or near halfof a new tube.

The 'double button' test is to reduce the Screen voltage, and thus limit the current.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> That's what I'm thinking. I need to find the manual for the TV-7...
>
> Will let you know what I find. It's more a matter of getting a setting that produces a consistent reading with a known-good tube. It's even really not important what the actual number is if all you're doing is matching them.
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
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>
> From: Garey Barrell
> Sent: Wednesday, June 12, 2013 9:47 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors
>

>
>
> I don't know anything about the 'other' models, but do they have the same button set-up?? Some of the tests you have to push and hold one
> button, then press another??I would think the element switches would be the same??
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> 73, Garey - K4OAH
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> Steve Wedge wrote:
>> Yeah, I know - I asked him. I was wondering if anyone on here had converted the settings. There's no reason why it wouldn't work, it's just finding the right settings.
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>> From: Garey Barrell
>> Sent: Tuesday, June 11, 2013 10:22 PM
>> To: DrakeRadio@yahoogroups.com
>> Subject: Re: [DrakeRadio] TV-7 vs TV-10 and Compactron adaptors
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>> Steve -
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>> Dan says his data is for the TV-7/xU only.
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>> 73, Garey - K4OAH
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>> Steve Wedge wrote:
>>> Has anyone used a TV-3 or TV-10 with the Compactron adaptors? How close would the settings be from the TV-7?
>>>
>>> I know it should be possible but don't want to spend days trying to arrive at the

```
settings.
>>>
```

14316. 4-NB alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:37:47 UTC
From: Steve Wedge
Topic: 14316 Message: 14316

I'm reading the sheet that comes with the 4-NB noise blanker - specifically the alignment procedure. The procedure says to "Tune in a crystal calibrator at 28.5 MHz" Do I need to hook up an external calibrator and align with the function switch in the "NB" position, or do I have the function switch in CAL and adjust while using the internal calibrator?

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14317. Re: [DrakeRadio] 4-NB alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 14:59:50 UTC
From: Garey Barrell
Topic: 14316 Message: 14317

Steve -

RTFCD!! The 4-NB manual in MISC has the 'correct' alignment procedure.

As to your particular question, you add a clip lead to turn on the CAL in the NB position.

Word of warning.... The 'NULL' adjustment is V.E.R.Y. sharp and easy to miss. You sure won't see it with a DMM!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I'm reading the sheet that comes with the 4-NB noise blanker - specifically the alignment procedure. The procedure says to "Tune in a crystal calibrator at 28.5 MHz" Do I need to hook up an external calibrator and align with the function switch in the "NB" position, or do I have the function switch in CAL and adjust while using the internal calibrator?
>

14318. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 17:47:19 UTC
From: Richard Knoppow
Topic: 14229 Message: 14318

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 12, 2013 6:35 AM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> Ian -
>
> Thanks Ian. Well that's the obvious answer, but I'd like
> for someone to explain the 'why' of it. Do MORE electrons
> have to make the trip
> from the Cathode to the Plate for higher frequencies. Do
> the electrons have to be closer together for the higher
> frequencies? Does it
> require more 'collisions' during the trip?? Something akin
> to 'skin effect' or ??? Do UHF tubes require bigger, more
> active Cathode coatings?
>
> I know there's a reason, but so far I haven't been able to
> figure (or find) it out!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA

I am still researching this. The main limitation on
the high frequency performance of a tube is transit time.
The second limitation is input and output capacitance. The
latter can be to some degree overcome in RF amplifiers by
making the capacitance part of the input or output tank
circuits. Transit time is fixed by the spacing of the
elements. Tubes are made with very rigid structures; grids
do not sag unless very seriously overheated. Keep in mind
that the "processing" of the tube in manufacture, that is
the evacuation, sealing, and gettering, all take place at
very elevated temperatures. I am tempted to agree with
Steve that the main culprit is loss of gain due to loss of
emission. One of the characteristics of tubes often
overlooked is perveance, this is a measure of the efficiency
of the electron emitting system. Perveance tells how much
plate current can be drawn at a given plate voltage. Tube
makers tried to increase the perveance of tubes as much as
possible so that they could operate with good efficiency at
low plate voltages. Perveance is determined mainly by the
area of the cathode and the spacing of the grid from the
cathode. As cathode emission falls of perveance becomes

less. I think all tubes fall off in gain with frequency but that as the tube emission becomes less the effect becomes more obvious because the tube can no longer reach the same plate current at its plate voltage even when driven harder. This may be wrong. I am going over some older books that are quite detailed on vacuum tube operation and may learn more.
BTW, I learned incidently that certain types of getters depend on ionization to work. When a tube is stored for very long periods without use this mode of gettering is ineffective so the tubes may become gassy. I am not sure if this type of getter was used alone in tubes made after about the mid- 1930s. Tube degassers were devided into "getters" and "keepers" at least in RCA parlance. Getters abrorbed gasses while the tube was operating, keepers absorbed gasses while the tube was cold.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14319. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 18:11:38 UTC
From: Garey Barrell
Topic: 14229 Message: 14319

Richard -

I think you're getting close!

Perveance is one of the primary factors for selecting sweep tubes for transmitters of the era. There is a considerable price penalty to pay
for 800V rated components over 650 V. Think electrolyticcaps, diodes, wire insulation, etc. of the day. This is one of the reasons why an
S-Line is rated for 100W with it's 800 VDC supply, while Drake was getting 140W with 650. The 6146 isn't nearly the perveance of 6JB6s,
etc. Granted, a 40% increase in output power isn't a big deal, but keep in mind that ham radio manufacturers were in a 'horsepower race' at
the time, as were the audiophile manufacturers.

The 6JB6 can support Cathode currents of as much as an Amp at 650 VDC, which is also what makes them so eager to destroy themselves when
operated out of resonance!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, June 12, 2013 6:35 AM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
>
>> Ian -
>>
>> Thanks Ian. Well that's the obvious answer, but I'd like
>> for someone to explain the 'why' of it. Do MORE electrons
>> have to make the trip
>> from the Cathode to the Plate for higher frequencies. Do
>> the electrons have to be closer together for the higher
>> frequencies? Does it
>> require more 'collisions' during the trip?? Something akin
>> to 'skin effect' or ??? Do UHF tubes require bigger, more
>> active Cathode coatings?
>>
>> I know there's a reason, but so far I haven't been able to

>> figure (or find) it out!! :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
> I am still researching this. The main limitation on
> the high frequency performance of a tube is transit time.
> The second limitation is input and output capacitance. The
> latter can be to some degree overcome in RF amplifiers by
> making the capacitance part of the input or output tank
> circuits. Transit time is fixed by the spacing of the
> elements. Tubes are made with very rigid structures; grids
> do not sag unless very seriously overheated. Keep in mind
> that the "processing" of the tube in manufacture, that is
> the evacuation, sealing, and gettering, all take place at
> very elevated temperatures. I am tempted to agree with
> Steve that the main culprit is loss of gain due to loss of
> emission. One of the characteristics of tubes often
> overlooked is perveance, this is a measure of the efficiency
> of the electron emitting system. Perveance tells how much
> plate current can be drawn at a given plate voltage. Tube
> makers tried to increase the perveance of tubes as much as
> possible so that they could operate with good efficiency at
> low plate voltages. Perveance is determined mainly by the
> area of the cathode and the spacing of the grid from the
> cathode. As cathode emission falls of perveance becomes
> less. I think all tubes fall off in gain with frequency but
> that as the tube emission becomes less the effect becomes
> more obvious because the tube can no longer reach the same
> plate current at its plate voltage even when driven harder.
> This may be wrong. I am going over some older books that
> are quite detailed on vacuum tube operation and may learn
> more.
> BTW, I learned incidently that certain types of getters
> depend on ionization to work. When a tube is stored for very
> long periods without use this mode of gettering is
> ineffective so the tubes may become gassy. I am not sure if
> this type of getter was used alone in tubes made after about
> the mid- 1930s. Tube degassers were devided into "getters"
> and "keepers" at least in RCA parlance. Getters abrorbed
> gasses while the tube was operating, keepers absorbed gasses
> while the tube was cold.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

14320. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 19:35:59 UTC
From: Richard Knoppow
Topic: 14229 Message: 14320

----- Original Message -----
From: "Richard Knoppow" <1oldlens1@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 12, 2013 10:47 AM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Having read some more I find my remarks about getters were correct but somewhat premature. RCA at least was very aware of the storage and "keeping" problem and used different getters to obtain satisfactory results. It is evidently magnesium that requires ionization. Later getters used barium compounds along with magnesium or aluminum and there were also combinations of barium and tantalum called Batalum. I am still reading over the series of RCA lectures published in 1940 and will start the much larger version from the 1950's. The lecture series was for RCA personel, Mostly at the tube plant at Harrison N.J. but I think RCA may have published the collected lectures for the public. These are interesting because they are from the horse's mouth so to speak. Tube manufacture was quite complicated and required a lot of specialized knowledge of such things as glass and metalurgy. Many probably know that the obtaining of a very good vacuum is vital. One reason DeForest's first tubes were not successful was that he did not realize the importance of a good vacuum. In fact, in his testimony in patent litigation it turned out that he really did not understand how tubes worked. The need for a good vacuum and means to obtain it were discovered indepently and simultaneously by Irving Langmuir at General Electric, and H.D.Arnold at Western Electric.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14321. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 20:08:26 UTC
From: Doug Smith
Topic: 14229 Message: 14321

This makes sense to me. I visualize a curve of power output (vertical axis) vs. frequency (horizontal axis). Power output is a relatively flat line up to the upper frequency bound and then smoothly falls off as frequency continues to increase.

Then, as perveance / emission starts to fall off due to usage the curve shifts to the left. Thus, RF output on 10 meters starts to fall off. Then, 15 meters, etc. The interelectrode capacitance does not change so neutralization does not change.

Interesting discussion!

Doug, W7KF
http://www.w7kf.com

On 6/12/2013 11:47 AM, Richard Knoppow wrote:
... snip ...
>
> I think all tubes fall off in gain with frequency but
> that as the tube emission becomes less the effect becomes
> more obvious because the tube can no longer reach the same
> plate current at its plate voltage even when driven harder.
> This may be wrong. I am going over some older books that
> are quite detailed on vacuum tube operation and may learn
> more.
>

[Non-text portions of this message have been removed]

14322. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 20:23:47 UTC
From: Garey Barrell
Topic: 14229 Message: 14322

Doug -

Yabbut..... WHY does the output fall off at the higher frequencies?

Is it BECAUSE the emission is reduced? WEAK (at RF) tubes still test 'strong' on a tube tester @ 60 Hz.

Is it just a result of emission reduction with use? WHY does it take MORE emission at RF?

We're even relatively close to 'on-topic'. :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug Smith wrote:
> This makes sense to me. I visualize a curve of power output (vertical
> axis) vs. frequency (horizontal axis). Power output is a relatively
> flat line up to the upper frequency bound and then smoothly falls off as
> frequency continues to increase.
>
> Then, as perveance / emission starts to fall off due to usage the curve
> shifts to the left. Thus, RF output on 10 meters starts to fall off.
> Then, 15 meters, etc. The interelectrode capacitance does not change so
> neutralization does not change.
>
> Interesting discussion!
>
> Doug, W7KF
> http://www.w7kf.com
>
>
> On 6/12/2013 11:47 AM, Richard Knoppow wrote:
> ... snip ...
>> I think all tubes fall off in gain with frequency but
>> that as the tube emission becomes less the effect becomes
>> more obvious because the tube can no longer reach the same
>> plate current at its plate voltage even when driven harder.
>> This may be wrong. I am going over some older books that
>> are quite detailed on vacuum tube operation and may learn
>> more.

14323. Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 20:41:48 UTC
From: John
Topic: 14229 Message: 14323

Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)

John

--- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:

>
>
> Hey, don't shoot the messenger! :P I didn't come up with it, I read it
> somewhere. And you know that everything your read on the internet is true,
> right?
>

> 73
>
> -Jim
> NU0C

14324. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 20:58:22 UTC
From: Steve Wedge
Topic: 14229 Message: 14324

I'm pretty sure it was in jest. Thicken thu skin :)

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 12, 2013, at 4:41 PM, "John" <wb0rxl@...> wrote:

> Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)
>
> John
>
> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>
> > >
> > >
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> > > somewhere. And you know that everything your read on the internet is true,
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> > >
> >
> > > 73
> > >
> > > -Jim
> > > NU0C
> >
> >

[Non-text portions of this message have been removed]

14325. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 20:59:19 UTC
From: Garey Barrell
Topic: 14229 Message: 14325

John -

Nahhh, nobody's keeping score..... There are some areas, especially in the R-4C, where lead dress can minimize (or maximize!) feedthrough
of BFO from the 3rd Mixer back into the IF. There are also instances of hash into the audio in the mid-later receivers being sensitive to
lead placement.

Jim's just a special case.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

John wrote:
> Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)
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> John
>
> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
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>> Hey, don't shoot the messenger! :P I didn't come up with it, I read it
>> somewhere. And you know that everything your read on the internet is true,
>> right?
>>
>> 73
>>
>> -Jim
>> NU0C
>

14326. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 21:00:20 UTC
From: Steve Wedge
Topic: 14229 Message: 14326

I'm enjoying this discussion: it's making us all think about "why" something we've all observed is happening.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 12, 2013, at 1:47 PM, "Richard Knoppow" <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, June 12, 2013 6:35 AM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
> > Ian -
> >
> > Thanks Ian. Well that's the obvious answer, but I'd like
> > for someone to explain the 'why' of it. Do MORE electrons
> > have to make the trip
> > from the Cathode to the Plate for higher frequencies. Do
> > the electrons have to be closer together for the higher
> > frequencies? Does it
> > require more 'collisions' during the trip?? Something akin
> > to 'skin effect' or ??? Do UHF tubes require bigger, more
> > active Cathode coatings?
> >
> > I know there's a reason, but so far I haven't been able to
> > figure (or find) it out!! :-)
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
>
> I am still researching this. The main limitation on
> the high frequency performance of a tube is transit time.
> The second limitation is input and output capacitance. The
> latter can be to some degree overcome in RF amplifiers by
> making the capacitance part of the input or output tank
> circuits. Transit time is fixed by the spacing of the
> elements. Tubes are made with very rigid structures; grids
> do not sag unless very seriously overheated. Keep in mind
> that the "processing" of the tube in manufacture, that is
> the evacuation, sealing, and gettering, all take place at
> very elevated temperatures. I am tempted to agree with
> Steve that the main culprit is loss of gain due to loss of
> emission. One of the characteristics of tubes often

> overlooked is perveance, this is a measure of the efficiency
> of the electron emitting system. Perveance tells how much
> plate current can be drawn at a given plate voltage. Tube
> makers tried to increase the perveance of tubes as much as
> possible so that they could operate with good efficiency at
> low plate voltages. Perveance is determined mainly by the
> area of the cathode and the spacing of the grid from the
> cathode. As cathode emission falls of perveance becomes
> less. I think all tubes fall off in gain with frequency but
> that as the tube emission becomes less the effect becomes
> more obvious because the tube can no longer reach the same
> plate current at its plate voltage even when driven harder.
> This may be wrong. I am going over some older books that
> are quite detailed on vacuum tube operation and may learn
> more.
> BTW, I learned incidently that certain types of getters
> depend on ionization to work. When a tube is stored for very
> long periods without use this mode of gettering is
> ineffective so the tubes may become gassy. I am not sure if
> this type of getter was used alone in tubes made after about
> the mid- 1930s. Tube degassers were devided into "getters"
> and "keepers" at least in RCA parlance. Getters abrorbed
> gasses while the tube was operating, keepers absorbed gasses
> while the tube was cold.
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>

[Non-text portions of this message have been removed]

14327. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 22:02:19 UTC
From: Richard Knoppow
Topic: 14229 Message: 14327

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 12, 2013 1:23 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> Doug -
>
> Yabbut..... WHY does the output fall off at the higher
> frequencies?
>
> Is it BECAUSE the emission is reduced? WEAK (at RF)
> tubes still test 'strong' on a tube tester @ 60 Hz.
>
> Is it just a result of emission reduction with use? WHY
> does it take MORE emission at RF?
>
> We're even relatively close to 'on-topic'. :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

I think, but have to do more research, its because it takes more oomph at the higher frequencies due to the usual effects of transit time and interelectrode capacitance, etc but that when the emission is up its not as noticable. Note that full power falls off a little on 10 meters even with fresh tubes. Tube data sheets for transmitting tubes always give information on output vs: frequency. There is usually some frequency stated where the tube will run at full ratings and at lower ratings for higher frequencies. The big RCA tube handbook HB-3 has a chart in the transmitting tube section that gives maximum frequencies for the tubes listed. These vary all over the place. For instance, the old 891, a triode used in high power broadcast transmitters has a HF limit of 1.5 mhz while the 5592 which is rated at 50KW output Class-C is rated at 50Mhz. The 891, however will work up to 20Mhz at helf ratings. I also saw (and will try to find) an ad from General Electric c.1947 for a four digit number version of a 6L6 saying it was rated for RF use. I don't know what was different or if these were really a different design or just selected off the line the way low-microphonic tubes were.
It would be interesting to build a high power tube tester and measure the gain and some other characteristics

of these tubes at RF. The scheme would not be difficult but controlling errors at 30 mhz would take a lot of care. I have no doubt that tubes can test good and yet not work well at elevated frequencies. It would be intesting to measure the Gm at low frequencies and see if it _does_ fall off some for tubes that are weak at high frequencies. It may be that a tube can have a somewhat low but still acceptable Gm on the tester and be perfectly fine in many applications but still be weak at high frequencies. But, I am speculating (a more respectable term than guessing) and what is needed is careful measurement.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14328. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-12 23:56:32 UTC
From: Doug Smith
Topic: 14229 Message: 14328

Well, in my vivid (but 2D) imagination I see the graph showing tube emission which naturally falls off with increasing frequency. This is true of all the tubes I've ever encountered and I suppose it must be due to the laws of physics, the construction of the tube, the propagation of electrons within the tube, etc. etc. All that stuff is *way* beyond me.

But, if that curve exists (and I think that in general we're all in agreement that it does exist) then when the tube's emission begins to fall off then the curve either shifts to the left or down or some combination of the two. That's when we see the 10 meter output start to drop off. Apparently, for the 6JB6, 30 MHz is near the "knee" of the curve, out near the right hand edge.

If the tubes were 4CX250b's we might not notice the fall-off at 30 MHz but would have to go to a much higher frequency to observe the effect.

I think that it's a near miracle that 6JB6's work up to 30 MHz. Weren't they designed for 15 KHz service?

The 60 Hz tube test for matching 6JB6's is already inadequate. Now we know that they should be matched at 28 MHz looking for similar curves. I just *know* that somebody here is now scribbling furiously on the back of an envelope to come up with some sort of "curve tracer" design for the ultimate in 6JB6 matching technology!

Doug, W7KF
http://www.w7kf.com

On 6/12/2013 2:23 PM, Garey Barrell wrote:
>
> Doug -
>
> Yabbut..... WHY does the output fall off at the higher frequencies?
>
> Is it BECAUSE the emission is reduced? WEAK (at RF) tubes still test
> 'strong' on a tube tester @ 60 Hz.
>
> Is it just a result of emission reduction with use? WHY does it take
> MORE emission at RF?
>
> We're even relatively close to 'on-topic'. :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>

[Non-text portions of this message have been removed]

14329. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 00:29:30 UTC
From: Ian Wilson
Topic: 14229 Message: 14329

1614 is a "transmitter-rated 6L6" - 21W, 80MHz.

73, ian K3IMW

On Wed, Jun 12, 2013 at 3:02 PM, Richard Knoppow <1oldlens1@...>wrote:

> **
>
>
>
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@mindspring.com>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, June 12, 2013 1:23 PM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
> > Doug -
> >
> > Yabbut..... WHY does the output fall off at the higher
> > frequencies?
> >
> > Is it BECAUSE the emission is reduced? WEAK (at RF)
> > tubes still test 'strong' on a tube tester @ 60 Hz.
> >
> > Is it just a result of emission reduction with use? WHY
> > does it take MORE emission at RF?
> >
> > We're even relatively close to 'on-topic'. :-)
> >
> > 73, Garey - K4OAH
> > Glen Allen, VA
> >
> I think, but have to do more research, its because it
> takes more oomph at the higher frequencies due to the usual
> effects of transit time and interelectrode capacitance, etc
> but that when the emission is up its not as noticable. Note
> that full power falls off a little on 10 meters even with
> fresh tubes. Tube data sheets for transmitting tubes always
> give information on output vs: frequency. There is usually
> some frequency stated where the tube will run at full
> ratings and at lower ratings for higher frequencies. The
> big RCA tube handbook HB-3 has a chart in the transmitting
> tube section that gives maximum frequencies for the tubes
> listed. These vary all over the place. For instance, the old
> 891, a triode used in high power broadcast transmitters has
> a HF limit of 1.5 mhz while the 5592 which is rated at 50KW

> output Class-C is rated at 50Mhz. The 891, however will work
> up to 20Mhz at helf ratings. I also saw (and will try to
> find) an ad from General Electric c.1947 for a four digit
> number version of a 6L6 saying it was rated for RF use. I
> don't know what was different or if these were really a
> different design or just selected off the line the way
> low-microphonic tubes were.
> It would be interesting to build a high power tube
> tester and measure the gain and some other characteristics
> of these tubes at RF. The scheme would not be difficult but
> controlling errors at 30 mhz would take a lot of care. I
> have no doubt that tubes can test good and yet not work
> well at elevated frequencies. It would be intesting to
> measure the Gm at low frequencies and see if it _does_ fall
> off some for tubes that are weak at high frequencies. It may
> be that a tube can have a somewhat low but still acceptable
> Gm on the tester and be perfectly fine in many applications
> but still be weak at high frequencies. But, I am speculating
> (a more respectable term than guessing) and what is needed
> is careful measurement.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>

[Non-text portions of this message have been removed]

14330. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 01:52:47 UTC
From: Garey Barrell
Topic: 14229 Message: 14330

Richard -

Yes, I think we're circling in on the truth.

The 4 digit tube you're thinking of is the 1614, an 'RF rated 6L6'. I don't know if it was selected from 6L6 or what. Interestingly it was
used in the Johnson Ranger, as push-pull _modulators_ .. I could never make sense of that, seems that if it was 'RF Rated', whether it was
selected or special manufacture, would have made it MORE expensive, so why use it as a MODULATOR???

I had not thought of the frequency limit on tubes..... Most transmitting tubes are rated at full power up to a specific frequency, and then
derated above that. That implies a loss of 'efficiency' though, rather than gain??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Garey Barrell" <k4oah@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Wednesday, June 12, 2013 1:23 PM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
>
>> Doug -
>>
>> Yabbut..... WHY does the output fall off at the higher
>> frequencies?
>>
>> Is it BECAUSE the emission is reduced? WEAK (at RF)
>> tubes still test 'strong' on a tube tester @ 60 Hz.
>>
>> Is it just a result of emission reduction with use? WHY
>> does it take MORE emission at RF?
>>
>> We're even relatively close to 'on-topic'. :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>

> I think, but have to do more research, its because it
> takes more oomph at the higher frequencies due to the usual
> effects of transit time and interelectrode capacitance, etc
> but that when the emission is up its not as noticable. Note
> that full power falls off a little on 10 meters even with
> fresh tubes. Tube data sheets for transmitting tubes always
> give information on output vs: frequency. There is usually
> some frequency stated where the tube will run at full
> ratings and at lower ratings for higher frequencies. The
> big RCA tube handbook HB-3 has a chart in the transmitting
> tube section that gives maximum frequencies for the tubes
> listed. These vary all over the place. For instance, the old
> 891, a triode used in high power broadcast transmitters has
> a HF limit of 1.5 mhz while the 5592 which is rated at 50KW
> output Class-C is rated at 50Mhz. The 891, however will work
> up to 20Mhz at helf ratings. I also saw (and will try to
> find) an ad from General Electric c.1947 for a four digit
> number version of a 6L6 saying it was rated for RF use. I
> don't know what was different or if these were really a
> different design or just selected off the line the way
> low-microphonic tubes were.
> It would be interesting to build a high power tube
> tester and measure the gain and some other characteristics
> of these tubes at RF. The scheme would not be difficult but
> controlling errors at 30 mhz would take a lot of care. I
> have no doubt that tubes can test good and yet not work
> well at elevated frequencies. It would be intesting to
> measure the Gm at low frequencies and see if it _does_ fall
> off some for tubes that are weak at high frequencies. It may
> be that a tube can have a somewhat low but still acceptable
> Gm on the tester and be perfectly fine in many applications
> but still be weak at high frequencies. But, I am speculating
> (a more respectable term than guessing) and what is needed
> is careful measurement.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
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>
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14331. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 02:03:06 UTC
From: Garey Barrell
Topic: 14229 Message: 14331

Doug -

Actually, the 6JB6 was used by Drake all the way up to 54 MHz in the TC-6 and TR-6, so the 'knee' must be a little further up! :-)

The '6 units both use three 6JB6 (set of 3 matched, $9 according to the manual) and run about 300W input power. No empirical data on output
power..... Probably 150W at best.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Doug Smith wrote:
> Well, in my vivid (but 2D) imagination I see the graph showing tube
> emission which naturally falls off with increasing frequency. This is
> true of all the tubes I've ever encountered and I suppose it must be due
> to the laws of physics, the construction of the tube, the propagation of
> electrons within the tube, etc. etc. All that stuff is *way* beyond me.
>
> But, if that curve exists (and I think that in general we're all in
> agreement that it does exist) then when the tube's emission begins to
> fall off then the curve either shifts to the left or down or some
> combination of the two. That's when we see the 10 meter output start to
> drop off. Apparently, for the 6JB6, 30 MHz is near the "knee" of the
> curve, out near the right hand edge.
>
> If the tubes were 4CX250b's we might not notice the fall-off at 30 MHz
> but would have to go to a much higher frequency to observe the effect.
>
> I think that it's a near miracle that 6JB6's work up to 30 MHz. Weren't
> they designed for 15 KHz service?
>
> The 60 Hz tube test for matching 6JB6's is already inadequate. Now we
> know that they should be matched at 28 MHz looking for similar curves.
> I just *know* that somebody here is now scribbling furiously on the back
> of an envelope to come up with some sort of "curve tracer" design for
> the ultimate in 6JB6 matching technology!
>
> Doug, W7KF
> http://www.w7kf.com
>
>

> On 6/12/2013 2:23 PM, Garey Barrell wrote:
>> Doug -
>>
>> Yabbut..... WHY does the output fall off at the higher frequencies?
>>
>> Is it BECAUSE the emission is reduced? WEAK (at RF) tubes still test
>> 'strong' on a tube tester @ 60 Hz.
>>
>> Is it just a result of emission reduction with use? WHY does it take
>> MORE emission at RF?
>>
>> We're even relatively close to 'on-topic'. :-)
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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>

14332. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 02:23:39 UTC
From: Jim Wiley
Topic: 14229 Message: 14332

I think part of the answer is that 1614 tubes were "ten dollars a ton" as surplus for some time. Johnson probably bought several hundred to a few thousand as stock to use for their various rigs. Relatively few people were aware that the 1614 was a direct replacement for a 6L6. The McIntosh audio amplifier we had at my high school (circa 1960) came with 1614's installed.

- Jim, KL7CC

On 6/12/2013 5:52 PM, Garey Barrell wrote:
>
> Richard -
>
> Yes, I think we're circling in on the truth.
>
> The 4 digit tube you're thinking of is the 1614, an 'RF rated 6L6'. I
> don't know if it was selected from 6L6 or what. Interestingly it was
> used in the Johnson Ranger, as push-pull _modulators_ .. I could never
> make sense of that, seems that if it was 'RF Rated', whether it was
> selected or special manufacture, would have made it MORE expensive, so
> why use it as a MODULATOR???
>

[Non-text portions of this message have been removed]

14333. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 01:57:38 UTC
From: Richard Knoppow
Topic: 14229 Message: 14333

----- Original Message -----
From: "Ian Wilson" <ianmwilson73@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 12, 2013 5:29 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> 1614 is a "transmitter-rated 6L6" - 21W, 80MHz.
>
> 73, ian K3IMW
>

Thanks, I found the General Electric ad for the GL 1614
and found the tube in the RCA handbook. There is no RF data
given for the 6L6 data sheet either by RCA or Sylvania. RCA
lists the frequency limit as 80 mhz for full ratings and up
to 120 mhz for 75% ratings. While all the characteristics
are identical to the metal 6L6 RCA refers to the 807 for
curves "within its ratings". Curiously enough the 807 does
not go quite as high as the 1614, which is interesting. It
would be useful to know what the difference is between the
6L6 and 1614.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14334. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 02:28:19 UTC
From: Richard Knoppow
Topic: 14229 Message: 14334

----- Original Message -----
From: "Doug Smith" <doug@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 12, 2013 4:56 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

I think one must be careful about taking the 16khz
design for granted. For one thing a sweep tube is designed
to handle a sawtooth which has all harmonics and must have
them up to a quite high frequency for good waveform and
linearity. Nonetheless, that might only be a couple of
hundred kiloherz. So what other characteristics does the
tube have that suits it to being a linear amplifier for RF?
According to an article in Ham Radio magazine for April,
1968 by William I Orr, sweep tubes are capable of reasonably
good distortion performance and will take quite large
overloads. One characteristic of sweep tubes is the ability
to take short but severe overloads. That may seem contrary
to the wisdom of tuning Drake gear but it seems to be the
case. According to Orr the distortion is greater than the
6146 family but the distortion specs of the Drake
transmitters is quite low so I suppose it depends on the
exact conditions of operation. Of course, one of the
principle reasons for using sweep tubes was their low cost
when new. These were made to be expendible parts of TV sets
where they often were pushed beyond their ratings and had
short lives, so they were available in bulk and cheap.
Sylvania published RF data for their sweep tubes, I
think the only manufacturer that did. I thought I had this
stuff in my archive but can't find it right now.
One possible advantage of the Compactron types over
conventional tubes like the 6146 is the absence of a base.
The Compactron uses a button stem construction similar to
miniature tubes so is free of the longer lead and dielectric
losses of a conventional tube base.
These tubes were designed to have very high
instantaneous plat current delivery. In sweep service the
current is high for the briefest pulse but when mistuned the
tube can draw destructively high current easily.
I have not seen a frequency limit on them, probably
Sylvania has that in its RF data sheets, but, judging from
other beam tetrodes of the general 6L6/807 type its probably
on the order of 60 to 100 mhz.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14335. Re: [DrakeRadio] 4-NB alignment

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 02:46:17 UTC
From: Steve Wedge
Topic: 14316 Message: 14335

Don't have the cd yet.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 12, 2013, at 10:59 AM, Garey Barrell <k4oah@...> wrote:

> Steve -
>
> RTFCD!! The 4-NB manual in MISC has the 'correct' alignment procedure.
>
> As to your particular question, you add a clip lead to turn on the CAL in the NB position.
>
> Word of warning.... The 'NULL' adjustment is V.E.R.Y. sharp and easy to miss. You sure won't see it with a DMM!! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Steve Wedge wrote:
> > I'm reading the sheet that comes with the 4-NB noise blanker - specifically the alignment procedure. The procedure says to "Tune in a crystal calibrator at 28.5 MHz" Do I need to hook up an external calibrator and align with the function switch in the "NB" position, or do I have the function switch in CAL and adjust while using the internal calibrator?
> > >
> >
> >

[Non-text portions of this message have been removed]

14336. FS TR3 w/2 power supplys

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 12:53:13 UTC
From: w0szv
Topic: 14336 Message: 14336

I have a TR3 with two power supplys for sale. TR3 was recently recapped. the power supplys are original. one base power supply and one 12v mobile power supply. base supply working fine, mobile untested so unknown. asking $150.00 for all , plus shipping. would prefer local pickup if possible. if interested please contact off list. my address is good in QRZ.
thanks
Eldon
w0szv

14337. Re: [DrakeRadio] FS TR3 w/2 power supplys

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 15:39:06 UTC
From: Robert & Ellen
Topic: 14336 Message: 14337

Does the TR-3 work correctly on all bands?
Robert
K1yfe

Sent from my iPhone

On Jun 13, 2013, at 7:53 AM, "w0szv" <skip4450@...> wrote:

> I have a TR3 with two power supplys for sale. TR3 was recently recapped. the power supplys are original. one base power supply and one 12v mobile power supply. base supply working fine, mobile untested so unknown. asking $150.00 for all , plus shipping. would prefer local pickup if possible. if interested please contact off list. my address is good in QRZ.
> thanks
> Eldon
> w0szv
>
>

[Non-text portions of this message have been removed]

14338. R4B with T4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-13 22:45:28 UTC
From: Earnest
Topic: 14338 Message: 14338

Hello everyone. I am new to the group and I did a search for the solution to my question, but I did not see what I was looking for. I have a T4C and a R4B that I would like to interconnect. What are the chances of success and is there anything special I need to be aware of? Thanks in advance.

Rick
K5FV

14339. Re: [DrakeRadio] R4B with T4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 01:01:02 UTC
From: Steve Wedge
Topic: 14338 Message: 14339

T-4C? As in no pto? That's a rare one!

Should work the same - you'll not use the car osc cable, obviously.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 13, 2013, at 6:45 PM, "Earnest" <k5fv@...> wrote:

> Hello everyone. I am new to the group and I did a search for the solution to my question, but I did not see what I was looking for. I have a T4C and a R4B that I would like to interconnect. What are the chances of success and is there anything special I need to be aware of? Thanks in advance.
>
> Rick
> K5FV
>
>

[Non-text portions of this message have been removed]

14340. Re: [DrakeRadio] R4B with T4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 02:20:13 UTC
From: Garey Barrell
Topic: 14338 Message: 14340

Rick -

I assume you mean a T-4XC. Cable together, with the exception of the CAR OSC and PTO LAMP jacks on the T-4XC. Leave themopen. If you want
to transceive, you'll need to do the 'Transceive Align' procedure, see attached.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Earnest wrote:
> Hello everyone. I am new to the group and I did a search for the solution to my question, but I did not see what I was looking for. I have a T4C and a R4B that I would like to interconnect. What are the chances of success and is there anything special I need to be aware of? Thanks in advance.
>
> Rick
> K5FV
>

[Non-text portions of this message have been removed]

14341. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 03:17:10 UTC
From: Jim Shorney
Topic: 14229 Message: 14341

On Wed, 12 Jun 2013 17:56:32 -0600, Doug Smith wrote:

>If the tubes were 4CX250b's we might not notice the fall-off at 30 MHz
>but would have to go to a much higher frequency to observe the effect.
>
>I just *know* that somebody here is now scribbling furiously on the back
>of an envelope to come up with some sort of "curve tracer" design for
>the ultimate in 6JB6 matching technology!

Or scribbling about how to convert a T-4xc to a single 4CX250B output tube...

73

-Jim (actually toyed with that idea for a GT-550A....)
NU0C

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14342. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 03:29:32 UTC
From: Jim Shorney
Topic: 14229 Message: 14342

Yes, it was. Garey and I frequently poke at each other, all in good fun.

Besides, he knows I could probably take him.... :D

73

-Jim
NU0C

On Wed, 12 Jun 2013 16:58:22 -0400, Steve Wedge wrote:

>I'm pretty sure it was in jest. Thicken thu skin :)
>
>Steve Wedge, W1ES/4
>Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
>On Jun 12, 2013, at 4:41 PM, "John" <wb0rxl@...> wrote:
>
>> Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)
>>
>> John
>>
>> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>>
>> >
>> >
>> > Hey, don't shoot the messenger! :P I didn't come up with it, I read it
>> > somewhere. And you know that everything your read on the internet is true,
>> > right?
>> >
>>
>> > 73
>> >
>> > -Jim
>> > NU0C
>
--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

14343. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 03:54:10 UTC
From: Jim Shorney
Topic: 14229 Message: 14343

I swear I was developing a 1 KHz notch in my hearing from when I worked at testing dispatch consoles. I eventually got smart and cobbled together some dummy loads. Now we have a guy who likes to make as much noise as he can while voice testing wireless mic systems on live speakers, with the volume turned up.

I once astonished a young lady at a jewelry store counter when I asked her if thier burglar alarm was still on. It was ultsrasonic, and apparently she couldn't hear it. I'm probably lucky that I wasn't escorted out by men in uniforms with guns.

Back in the 486 days, it wasn't uncommon to hear computer motherboards "singing" to me. People still think I'm crazy when I mention that....

73

-Jim
NU0C

On Wed, 12 Jun 2013 08:08:56 -0500, Bernie wrote:

>Jim,.
>Back in 1971-73 I worked as control board operator and transmitter engineer at a TV station with 10 black & white monitors right in front of me at arms length. If I thought about it, I could hear the high pitched frequency, but when it REALLY would show up was after an 8 hour shift when I was home, in bed and totally quiet. I think eventually that damn high pitched tone burned out those little hairs in my ears and today I can't hear above 12,000 hz.
>I absolutely refuse to have a dental assistant use ultrasonic tools to clean my teeth...the sound goes right to the center of my brain!
>
>Bernie in ND
>WD0GMD

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14344. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 03:55:55 UTC
From: Jim Shorney
Topic: 14229 Message: 14344

On Wed, 12 Jun 2013 08:45:30 -0400, Gary Woods wrote:

>It's a pretty low duty cycle, because the H-output only fires a short
>"flyback" pulse to kick the beam back to the start of the next scan line;
>the inductance of the deflection yoke integrates it into the deflection
>ramp.

That's the tidbit I was looking for! Thanks.

>A friend who is a physicist used to ask tech applicants if he had a nuclear
>accelerator in his office. Most had no idea the CRT TV qualified...

I like this guy already...

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14345. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 04:55:59 UTC
From: Richard Knoppow
Topic: 14229 Message: 14345

```
----- Original Message -----
From: "Jim Shorney" <jshorney@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 13, 2013 8:54 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

>
> I swear I was developing a 1 KHz notch in my hearing from
> when I worked at
> testing dispatch consoles. I eventually got smart and
> cobbled together some
> dummy loads. Now we have a guy who likes to make as much
> noise as he can while
> voice testing wireless mic systems on live speakers, with
> the volume turned up.
>
>
> I once astonished a young lady at a jewelry store counter
> when I asked her if
> thier burglar alarm was still on. It was ultsrasonic, and
> apparently she
> couldn't hear it. I'm probably lucky that I wasn't
> escorted out by men in
> uniforms with guns.
>
> Back in the 486 days, it wasn't uncommon to hear computer
> motherboards
> "singing" to me. People still think I'm crazy when I
> mention that....
>
> 73
>
> -Jim
> NU0C
Back when my ears worked I could hear ultra-sonic
burglar alarms and cleaners quite plainly. In fact, there
was a Sears store with something or other I had to go
through on one escalator, it felt like someone stuck
knitting needles through my ears. Others couldn't hear it.
Being in a TV station was awful with all those flybacks
going. Now I say "what" a lot.

--
Richard Knoppow
Los Angeles
```

WB6KBL
dickburk@...

14346. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 05:21:30 UTC
From: Jim Shorney
Topic: 14229 Message: 14346

On Thu, 13 Jun 2013 21:55:59 -0700, Richard Knoppow wrote:

> In fact, there
>was a Sears store with something or other I had to go
>through on one escalator, it felt like someone stuck
>knitting needles through my ears. Others couldn't hear it.
>Being in a TV station was awful with all those flybacks
>going

Yes, Sears had those too. This one, though, was in a store called Ardan's. It was loud enough to be uncomfortable, and I didn't stay long because I knew that I would end up with a nasty headache if I didn't get out of there. I did not frequent that store, although the last time I was in there before they closed, it was turned off.

At the other end of the spectrum, we have a group that tests the huge amplified stadium speakers at the other end of our building. They damp them as much as they can, and the dB levels at our end are well within safe limits, but it can get downright uncomfortrable when they hit certian very low frequencies. Different frequencies resonate with different parts of the body, and it doesn't help that we are near a wall that reflects the sound back the other direction. You can literally walk through the area and feel the nodes of the standing waves in the air. We have an impedance mismatch...

I'm not sure if the motherboard "singing" was due to load current variations in the onboard core regulators, or actual acoustic resonances in the circuit board traces, but is could have an almost musical character to it depending on what the computer was doing at the time. IIRC the core regulators were still mostly linear in those days, so that leaves acoustic resonances.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14347. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 13:10:28 UTC
From: Garey Barrell
Topic: 14229 Message: 14347

WHERE??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> Yes, it was. Garey and I frequently poke at each other, all in good fun.
>
> Besides, he knows I could probably take him.... :D
>
> 73
>
> -Jim
> NU0C
>
> On Wed, 12 Jun 2013 16:58:22 -0400, Steve Wedge wrote:
>
>> I'm pretty sure it was in jest. Thicken thu skin :)
>>
>> Steve Wedge, W1ES/4
>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>>
>> On Jun 12, 2013, at 4:41 PM, "John" <wb0rxl@...> wrote:
>>
>>> Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)
>>>
>>> John
>>>
>>> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>>>
>>>>
>>>> Hey, don't shoot the messenger! :P I didn't come up with it, I read it
>>>> somewhere. And you know that everything your read on the internet is true,
>>>> right?
>>>>
>>>> 73
>>>>
>>>> -Jim
>>>> NU0C

> --
>
> "I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

14348. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 13:12:27 UTC
From: Garey Barrell
Topic: 14229 Message: 14348

smart guy, huh?!?!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Jim Shorney wrote:
> On Wed, 12 Jun 2013 08:45:30 -0400, Gary Woods wrote:
>
>> It's a pretty low duty cycle, because the H-output only fires a short
>> "flyback" pulse to kick the beam back to the start of the next scan line;
>> the inductance of the deflection yoke integrates it into the deflection
>> ramp.
> That's the tidbit I was looking for! Thanks.
>
>
>> A friend who is a physicist used to ask tech applicants if he had a nuclear
>> accelerator in his office. Most had no idea the CRT TV qualified...
>
> I like this guy already...
>
>
> 73
>
> -Jim
> NU0C
>
>
> --
> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris,
"The Doctor's Wife"
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

14349. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 13:13:48 UTC
From: Garey Barrell
Topic: 14229 Message: 14349

Richard Knoppow wrote:
> ----- Original Message -----
> From: "Jim Shorney" <jshorney@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 13, 2013 8:54 PM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
>
>> I swear I was developing a 1 KHz notch in my hearing from
>> when I worked at
>> testing dispatch consoles. I eventually got smart and
>> cobbled together some
>> dummy loads. Now we have a guy who likes to make as much
>> noise as he can while
>> voice testing wireless mic systems on live speakers, with
>> the volume turned up.
>>
>>
>> I once astonished a young lady at a jewelry store counter
>> when I asked her if
>> thier burglar alarm was still on. It was ultsrasonic, and
>> apparently she
>> couldn't hear it. I'm probably lucky that I wasn't
>> escorted out by men in
>> uniforms with guns.
>>
>> Back in the 486 days, it wasn't uncommon to hear computer
>> motherboards
>> "singing" to me. People still think I'm crazy when I
>> mention that....
>>
>> 73
>>
>> -Jim
>> NU0C
> Back when my ears worked I could hear ultra-sonic
> burglar alarms and cleaners quite plainly. In fact, there
> was a Sears store with something or other I had to go
> through on one escalator, it felt like someone stuck
> knitting needles through my ears. Others couldn't hear it.
> Being in a TV station was awful with all those flybacks
> going. Now I say "what" a lot.
>
>
WHAT?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14350. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 13:22:54 UTC
From: Barry
Topic: 14229 Message: 14350

Back when, I was politely asked by Uncle Sam to attend a pre-induction physical. Part of that was a hearing test. When I finished that, they told me they would want me on a submarine listening to sonar. I thought that was kind of weird as the sounds I had always heard on tv from sonar scenes had a rather low frequency sound. Maybe everything on tv isn't portrayed realistically?!?!

Barry - N4BUQ

14351. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 13:48:01 UTC
From: Steve Wedge
Topic: 14229 Message: 14351

You'd need higher voltage.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 13, 2013, at 11:17 PM, "Jim Shorney" <jshorney@...> wrote:

> On Wed, 12 Jun 2013 17:56:32 -0600, Doug Smith wrote:
>
> >If the tubes were 4CX250b's we might not notice the fall-off at 30 MHz
> >but would have to go to a much higher frequency to observe the effect.
> >
> >I just *know* that somebody here is now scribbling furiously on the back
> >of an envelope to come up with some sort of "curve tracer" design for
> >the ultimate in 6JB6 matching technology!
>
> Or scribbling about how to convert a T-4xc to a single 4CX250B output tube...
>
> 73
>
> -Jim (actually toyed with that idea for a GT-550A....)
> NU0C
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>
> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
> http://incolor.inetnebr.com/jshorney
> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

14352. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 14:34:23 UTC
From: Jim Shorney
Topic: 14229 Message: 14352

Only if you wanted to run the tube at full power. I've considered all the ins and outs of this scenario, it's one of those "impractical, but it sure would be fun" projects. Not unlike the European ham who completely rebuilt a TR-7 into a different cabinet.

73

-Jim
NU0C

On Fri, 14 Jun 2013 09:48:01 -0400, Steve Wedge wrote:

>You'd need higher voltage.
>
>Steve Wedge, W1ES/4
>Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>
>On Jun 13, 2013, at 11:17 PM, "Jim Shorney" <jshorney@...> wrote:
>
>> On Wed, 12 Jun 2013 17:56:32 -0600, Doug Smith wrote:
>>
>> >If the tubes were 4CX250b's we might not notice the fall-off at 30 MHz
>> >but would have to go to a much higher frequency to observe the effect.
>> >
>> >I just *know* that somebody here is now scribbling furiously on the back
>> >of an envelope to come up with some sort of "curve tracer" design for
>> >the ultimate in 6JB6 matching technology!
>>
>> Or scribbling about how to convert a T-4xc to a single 4CX250B output tube...
>>
>> 73
>>
>> -Jim (actually toyed with that idea for a GT-550A....)
>> NU0C
>>
>> --
>> Ham Radio NU0C
>> Lincoln, Nebraska, U.S.S.A.
>> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
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>> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
>>
>> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
>> http://incolor.inetnebr.com/jshorney

>> http://www.nebraskaghosts.org
>>
>>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14353. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 14:36:21 UTC
From: Jim Shorney
Topic: 14229 Message: 14353

WHAT?

On Fri, 14 Jun 2013 09:10:28 -0400, Garey Barrell wrote:

>WHERE??
>
>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>Jim Shorney wrote:
>> Yes, it was. Garey and I frequently poke at each other, all in good fun.
>>
>> Besides, he knows I could probably take him.... :D
>>
>> 73
>>
>> -Jim
>> NU0C
>>
>> On Wed, 12 Jun 2013 16:58:22 -0400, Steve Wedge wrote:
>>
>>> I'm pretty sure it was in jest. Thicken thu skin :)
>>>
>>> Steve Wedge, W1ES/4
>>> Sent from my iPhone: PSE excuse any autocorrect faux pas :)
>>>
>>> On Jun 12, 2013, at 4:41 PM, "John" <wb0rxl@...> wrote:
>>>
>>>> Don't feel badly, Jim. I was shot down for relating something I thought I had even read on this very forum about routing of the wiring harness making a difference in the operation and sound of a Drake receiver. An extremely helpful group, but it can be a rough neighborhood at times. ;)
>>>>
>>>> John
>>>>
>>>> --- In DrakeRadio@yahoogroups.com, "Jim Shorney" <jshorney@...> wrote:
>>>>
>>>>>
>>>>> Hey, don't shoot the messenger! :P I didn't come up with it, I read it
>>>>> somewhere. And you know that everything your read on the internet is true,
>>>>> right?

>>>>>
>>>>> 73
>>>>>
>>>>> -Jim
>>>>> NU0C
>> --
>>
>> "I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"
>>
>>
>>
>>
>> ------------------------------------
>>
>> Yahoo! Groups Links
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>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14354. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 17:10:51 UTC
From: Ethan Blanton
Topic: 14229 Message: 14354

Jim Shorney spake unto us the following wisdom:
> On Thu, 13 Jun 2013 21:55:59 -0700, Richard Knoppow wrote:
> I'm not sure if the motherboard "singing" was due to load current variations in
> the onboard core regulators, or actual acoustic resonances in the circuit board
> traces, but is could have an almost musical character to it depending on what
> the computer was doing at the time. IIRC the core regulators were still mostly
> linear in those days, so that leaves acoustic resonances.

I don't know, but it still happens! I have a Pentium M laptop from
maybe 2005 that I can easily hear when it does large screen refreshes
in the 2D engine. Another laptop has a touchpad that "chirps" when
you drag your finger across it -- that one makes sense, I'm sure the
capacitive sensor is running in the low 10s of kHz and I'm hearing
some component that could stand a bit of potting. That particular
touch sensor splats noise all across the low bands, too, at least up
through 40m. I can hear it on my TR-4. I assume that's on the
controller/communication side, though, and not the same noise that is
audible.

Ethan

14355. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 18:26:33 UTC
From: Gary Woods
Topic: 14229 Message: 14355

On Fri, 14 Jun 2013 09:12:27 -0400, you wrote:

>smart guy, huh?!?!

Frighteningly so; he's on the board at CERN. Won't admit whether he
believes in the Higgs boson...

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

14356. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 18:28:43 UTC
From: Gary Woods
Topic: 14229 Message: 14356

On Fri, 14 Jun 2013 08:22:54 -0500, you wrote:

>When I finished that, they told me they would want me on a submarine listening to sonar. I thought that was kind of weird as the sounds I had always heard on tv from sonar scenes had a rather low frequency sound

One of the skills they were looking for was acute pitch discrimination. A musical background helps.... I once checked myself against a sig gen into my receiver and a counter, and I could hear a hz or two difference in the pitch. Probably not good enough to be a piano tuner...

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

14357. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 19:38:32 UTC
From: Richard Knoppow
Topic: 14229 Message: 14357

----- Original Message -----
From: "Gary Woods" <garygarlic@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, June 14, 2013 11:28 AM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> On Fri, 14 Jun 2013 08:22:54 -0500, you wrote:
>
>>When I finished that, they told me they would want me on a
>>submarine listening to sonar. I thought that was kind of
>>weird as the sounds I had always heard on tv from sonar
>>scenes had a rather low frequency sound
>
> One of the skills they were looking for was acute pitch
> discrimination. A
> musical background helps.... I once checked myself
> against a sig gen into
> my receiver and a counter, and I could hear a hz or two
> difference in the
> pitch. Probably not good enough to be a piano tuner...
>
>
I was told a long time ago that the singer Jo Stafford
(married to Paul Weston) had _absolute_ pitch. She and
Weston did an album of parody as Jonathan and Darlene
Edwards in which she sang just slightly off-key. I think
this was inspired by a vanity album by a singer whose name I
have now forgotten, some rich person who wanted to sing
opera and managed to make some records which are startlingly
awful.
I remember her as one of the rotating host of the
"Chesterfield Supper Club" a remarkble (for quality) fifteen
minute across the board program on NBC. Another of its hosts
was Perry Como. I have absolutely no on topic Drake
information to add to this.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14358. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 19:48:51 UTC
From: Gary Woods
Topic: 14229 Message: 14358

On Fri, 14 Jun 2013 12:38:32 -0700, you wrote:

> I think
>this was inspired by a vanity album by a singer whose name I
>have now forgotten, some rich person who wanted to sing
>opera and managed to make some records which are startlingly
>awful.

Mrs. Miller?
We now return you to your Drake radios, glowing softly in the corner.

--
Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
Zone 5/4 in upstate New York, 1420' elevation. NY WO G

14359. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 19:56:39 UTC
From: Barry
Topic: 14229 Message: 14359

Well, I've played the guitar (mostly by ear) so that would have played into it as we'll.
Barry

Sent from my iPad

On Jun 14, 2013, at 1:28 PM, Gary Woods <garygarlic@...> wrote:

> On Fri, 14 Jun 2013 08:22:54 -0500, you wrote:
>
>> When I finished that, they told me they would want me on a submarine listening to sonar. I thought that was kind of weird as the sounds I had always heard on tv from sonar scenes had a rather low frequency sound
>
> One of the skills they were looking for was acute pitch discrimination. A
> musical background helps.... I once checked myself against a sig gen into
> my receiver and a counter, and I could hear a hz or two difference in the
> pitch. Probably not good enough to be a piano tuner...
>
> --
> Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
> Zone 5/4 in upstate New York, 1420' elevation. NY WO G
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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14360. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 20:00:19 UTC
From: Barry
Topic: 14229 Message: 14360

Now they can sing off key and have the equipment put them on key. So much for "real" talent...
Barry

Sent from my iPad

On Jun 14, 2013, at 2:38 PM, "Richard Knoppow" <1oldlens1@...> wrote:

>
> ----- Original Message -----
> From: "Gary Woods" <garygarlic@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Friday, June 14, 2013 11:28 AM
> Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern
>
>
>> On Fri, 14 Jun 2013 08:22:54 -0500, you wrote:
>>
>>> When I finished that, they told me they would want me on a
>>> submarine listening to sonar. I thought that was kind of
>>> weird as the sounds I had always heard on tv from sonar
>>> scenes had a rather low frequency sound
>>
>> One of the skills they were looking for was acute pitch
>> discrimination. A
>> musical background helps.... I once checked myself
>> against a sig gen into
>> my receiver and a counter, and I could hear a hz or two
>> difference in the
>> pitch. Probably not good enough to be a piano tuner...
> I was told a long time ago that the singer Jo Stafford
> (married to Paul Weston) had _absolute_ pitch. She and
> Weston did an album of parody as Jonathan and Darlene
> Edwards in which she sang just slightly off-key. I think
> this was inspired by a vanity album by a singer whose name I
> have now forgotten, some rich person who wanted to sing
> opera and managed to make some records which are startlingly
> awful.
> I remember her as one of the rotating host of the
> "Chesterfield Supper Club" a remarkble (for quality) fifteen
> minute across the board program on NBC. Another of its hosts
> was Perry Como. I have absolutely no on topic Drake
> information to add to this.
>
> --
> Richard Knoppow

> Los Angeles
> WB6KBL
> dickburk@...
>
>
>
> ---
>
> Yahoo! Groups Links
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>

14361. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 20:01:55 UTC
From: Barry
Topic: 14229 Message: 14361

"we'll". Sorry for the iPad auto-correction!
Barry

Sent from my iPad

On Jun 14, 2013, at 2:56 PM, Barry <n4buq@...> wrote:

> Well, I've played the guitar (mostly by ear) so that would have played into it as we'll.
> Barry
>
> Sent from my iPad
>
> On Jun 14, 2013, at 1:28 PM, Gary Woods <garygarlic@...> wrote:
>
>> On Fri, 14 Jun 2013 08:22:54 -0500, you wrote:
>>
>>> When I finished that, they told me they would want me on a submarine listening to sonar. I thought that was kind of weird as the sounds I had always heard on tv from sonar scenes had a rather low frequency sound
>>
>> One of the skills they were looking for was acute pitch discrimination. A
>> musical background helps.... I once checked myself against a sig gen into
>> my receiver and a counter, and I could hear a hz or two difference in the
>> pitch. Probably not good enough to be a piano tuner...
>>
>> --
>> Gary Woods AKA K2AHC- PGP key on request, or at home.earthlink.net/~garygarlic
>> Zone 5/4 in upstate New York, 1420' elevation. NY WO G
>>
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>> ------------------------------------
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>> Yahoo! Groups Links
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> Yahoo! Groups Links
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14362. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 20:05:02 UTC
From: Richard Knoppow
Topic: 14229 Message: 14362

----- Original Message -----
From: "Barry" <n4buq@...>
To: <DrakeRadio@yahoogroups.com>
Cc: <DrakeRadio@yahoogroups.com>
Sent: Friday, June 14, 2013 12:56 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> Well, I've played the guitar (mostly by ear) so that would
> have played into it as we'll.
> Barry
>
Don't you find the lobes get stuck in the frets?

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14363. Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 20:15:39 UTC
From: Richard Knoppow
Topic: 14229 Message: 14363

----- Original Message -----
From: "Gary Woods" <garygarlic@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, June 14, 2013 12:48 PM
Subject: Re: [DrakeRadio] Re: 6JB6 Output Drop Pattern

> On Fri, 14 Jun 2013 12:38:32 -0700, you wrote:
>
>> I think
>>this was inspired by a vanity album by a singer whose name
>>I
>>have now forgotten, some rich person who wanted to sing
>>opera and managed to make some records which are
>>startlingly
>>awful.
>
> Mrs. Miller?
> We now return you to your Drake radios, glowing softly in
> the corner.
>
Thank you for reminding me of Elva Miller, however the
one I was thinking of was Florence Foster Jenkins. I think
Elva Miller was actually a fairly good singer but did
something like what Jo Stafford did. I think probably FFJ
was part of the inspiration for Susan Alexander in _Citizen
Kane_ along with Marian Davies. IMO a very cheap and unfair
shot at Marian who was a very talented commedien and a very
decent person.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14364. Current Draw for new Sylvanias ???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-14 21:17:52 UTC
From: Michael
Topic: 14364 Message: 14364

Howdy everyone ... Happy Father's Day to those who are. ;-)

My question:

Given a new set of properly neutralized Sylvania 6JB6 finals, in a T4XC, running exclusively CW, on say, 40 meters, with an average duty cycle of 25-30 wpm, how much current draw should I load to (assuming resonance) for optimum tube life?

I find it will go up to 500 mils, at resonance, but I cannot believe that is a good idea ... should it be between 330 and say 400?

Thanks,

Michael, nz4d

14365. Re: [DrakeRadio] Current Draw for new Sylvanias ???

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 02:00:46 UTC
From: Garey Barrell
Topic: 14364 Message: 14365

Michael -

No, that is not good. Most likely the meter shunt (R59) or calibration resistor (R58) have gone up in value, causing the PLATE meter to
read high. This is not a problem in itself, all you really care about is that the PA is in resonance. A correctly calibrated meter should
show about 350 mA, and 1bout 130-140W output on 40Min TUNE.

Where it IS a problem however is that when you set the idle current for 70 mA on the meter, it's actually only about 40 mA, which is NOT
good for linearity. It can make you very unwelcome to any nearby hams.

CheckR59, (don't forget the test lead resistance,) and you'll probably find that it has gone up to 4 ohms or so. Replace it with a 3 ohm
ceramic composition, 1W, resistor. Then measure its actual resistance and measure the voltage across it in TUNE, GAIN at minimum. Adjust
the BIAS voltage until you measure 210 mV across R59 (assuming it's 3.0 ohms). Then select a resistor for R58 so that the PLATE meter reads
70 mA with the transmitter upright.

You'll probably also want to check the Cathode resistors R53 and R54 and replace with ceramic composition 2W resistors. Also check R50 and
R51, and if out of tolerance replace with 1/2W carbon comps.

While you're in there, check R44 for value and condition, replace with 1/2W carbon comp if necessary.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Michael wrote:
> Howdy everyone ... Happy Father's Day to those who are. ;-)
>
> My question:
>
> Given a new set of properly neutralized Sylvania 6JB6 finals, in a T4XC, running exclusively CW, on say, 40 meters, with an average duty cycle of 25-30 wpm, how much current draw should I load to (assuming resonance) for optimum tube life?
>
> I find it will go up to 500 mils, at resonance, but I cannot believe that is a good idea ... should it be between 330 and say 400?
>
> Thanks,

>
> Michael, nz4d
>
>
>

14366. Drake W-4 Wattmeter PEP Amplifier Board

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 16:39:20 UTC
From: Paul Christensen
Topic: 14366 Message: 14366

Just finished the PCB design of a drop-in PEP board for the W-4 wattmeter. The existing meter wires are moved to the barrier terminal strip and the board mounts directly to the meter's 0.25" terminal bolts. The PEP board is powered from a standard 2.1mm coaxial DC jack or +9V battery. PEP/AVG can be switched right on back of the board -- or for those who aren't concerned about preserving originality, bring out the switch wiring to the front panel - but that requires a drilled hole. Super low DC offset op-amps used with on-board LDO regulator. Full RFI protection on the power and input meter leads. Full-scale trim and peak decay rate are adjustable.

A view of the PCB can be seen on my QRZ.com page, about a quarter of the way down the page.

http://www.qrz.com/db/W9AC

I'm wrapping up a couple other board designs but will have 10 available in about 60 days. I'll have more info on pricing at that time and will post here, assuming no objections from the moderator.

Paul, W9AC

[Non-text portions of this message have been removed]

14367. Re: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 16:55:41 UTC
From: Chuck Pool
Topic: 14366 Message: 14367

Paul W9AC,

You added another slick product for the Drakes, Drop-In W4 PEP Board.

Thank you for your work.

Chuck Pool - AA5WG
Cedar, Michigan

From: Paul Christensen <w9ac@...t>
To: DrakeRadio@yahoogroups.com
Sent: Saturday, June 15, 2013 12:39 PM
Subject: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Just finished the PCB design of a drop-in PEP board for the W-4 wattmeter. The existing meter wires are moved to the barrier terminal strip and the board mounts directly to the meter's 0.25" terminal bolts. The PEP board is powered from a standard 2.1mm coaxial DC jack or +9V battery. PEP/AVG can be switched right on back of the board -- or for those who aren't concerned about preserving originality, bring out the switch wiring to the front panel - but that requires a drilled hole. Super low DC offset op-amps used with on-board LDO regulator. Full RFI protection on the power and input meter leads. Full-scale trim and peak decay rate are adjustable.

A view of the PCB can be seen on my QRZ.com page, about a quarter of the way down the page.

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Paul, W9AC

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14368. Re: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 17:50:15 UTC
From: Doug
Topic: 14366 Message: 14368

Paul,

Do you have a peak reading board that will function with the MN-2000 tuner meter?

Thanks,

Doug N9XTF

Sent from my iPhone

On Jun 15, 2013, at 12:39, "Paul Christensen" <w9ac@...> wrote:

> Just finished the PCB design of a drop-in PEP board for the W-4 wattmeter. The existing meter wires are moved to the barrier terminal strip and the board mounts directly to the meter's 0.25" terminal bolts. The PEP board is powered from a standard 2.1mm coaxial DC jack or +9V battery. PEP/AVG can be switched right on back of the board -- or for those who aren't concerned about preserving originality, bring out the switch wiring to the front panel - but that requires a drilled hole. Super low DC offset op-amps used with on-board LDO regulator. Full RFI protection on the power and input meter leads. Full-scale trim and peak decay rate are adjustable.
>
> A view of the PCB can be seen on my QRZ.com page, about a quarter of the way down the page.
>
> http://www.qrz.com/db/W9AC
>
> I'm wrapping up a couple other board designs but will have 10 available in about 60 days. I'll have more info on pricing at that time and will post here, assuming no objections from the moderator.
>
> Paul, W9AC
>
> [Non-text portions of this message have been removed]
>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

[Non-text portions of this message have been removed]

14369. set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 19:54:03 UTC
From: yash@aol.com
Topic: 14369 Message: 14369

Just finished with cleaning up and getting my C-line up and running. a couple of questions. checking calibration between the two. set the r4c to 14200 and zero beat the dial , then switched in the t4xc and set on spot. Could hear the calb tone on the receiver as I zero beat the t4x dial, should the signal be heard loud like ,say equal to the r4c . the manual mentioned tweets getting slower and slower as you neared zero beat. Never heard any such tweets. Iam I doing something wrong ,or does something need work ?
Also if you never plan to use VOX, can the interconnect cables for the vox jacks be left off?
thanks
dale wt4t

[Non-text portions of this message have been removed]

14370. TR7 synthesizer problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 19:54:13 UTC
From: k6echoecho
Topic: 14370 Message: 14370

I am just setting up my shack with my TR7, after a few years of not being on the air with this rig.
After two years of not using my TR7, it has developed a synthesizer problem, roughly similar as described in an older threat between N8YX and WB2WIK (see below).

My synthesizer error is somewhat more specific as the one described in the N8YX-WB2WIK threat:

If the unit is powered on, the synthesizer sometimes in a reproducible fashion does not follow the band switch but rather ignores band switching.
Observations:
1) It usually switches fine from 21 to 14 to 7 to 3.5.

2) There is hysteresis in how the synthesizer follows the band switching:
To switch to 21 one usually has to overshoot with the band switch to 28. To switch to 3.5 one has to overshoot to 1.5 with the band switch

3) When powered on, the synthesizer never switches to 1.8 or 28.

4) The synthesizer sets ALWAYS correctly to any band set by the band switch (also 28 or 1.5!) after switching the transceiver off and on again.

I followed N8YXes instructions (below), removed DR7 and Digital Control unit, cleaned it and treated everything with DeOxit.
I did not resolder as suggested by N8YX, however, the soldering contacts seem fine and my error persists consistently.
Of course, I also wiggled all the switches that WB2WIK, again the switches seem solid and the problem did not change.

Anyone has a recommendation where I could search for a problem next?

Thanks a lot!

vy 73 de

Fritz, K6EE

N8YX
02-18-2009, 01:38 PM
1) Obtain the TR7 service manual
2) Obtain a bottle of DeOxIt
3) If you don't already have one, obtain a board puller or fashion one yourself
4) Remove wraparound case - 8 screws on bottom of radio
5) Locate DR7 readout board. Carefully remove the DR7 board, following the procedure in the service manual. Be sure to note where the various 5 and 6-pin connectors - along with the 1st mixer and band-select wire

(blue) go
6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
8) Replace all connectors and wires that you removed in Step 5. Then test rig.

What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.
WB2WIK
02-18-2009, 03:59 PM
1) Obtain the TR7 service manual
2) Obtain a bottle of DeOxIt
3) If you don't already have one, obtain a board puller or fashion one yourself
4) Remove wraparound case - 8 screws on bottom of radio
5) Locate DR7 readout board. Carefully remove the DR7 board, following the procedure in the service manual. Be sure to note where the various 5 and 6-pin connectors - along with the 1st mixer and band-select wire
(blue) go
6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
8) Replace all connectors and wires that you removed in Step 5. Then test rig.

What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.

::Good advice, albeit a fairly complex procedure (mostly removing the cover and unseating all the blind-mate connectors under the DR7 board, which takes a knack).

Before even doing that, you might try rocking these switches:

Bandswitch (front panel)
Auxiliary Program switch (front panel) Frequency counter switch (slide switch, EXT/NORM on rear panel)

If any of those are making crappy contact the frequency counter can act weirdly, as they all have an input to the counter itself.

WB2WIK/6

14371. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 20:44:14 UTC
From: Garey Barrell
Topic: 14369 Message: 14371

Dale -

The VOX cable must be connected for 'tweets' AND sidetone to work.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Just finished with cleaning up and getting my C-line up and running. a couple of questions. checking calibration between the two. set the r4c to 14200 and zero beat the dial , then switched in the t4xc and set on spot. Could hear the calb tone on the receiver as I zero beat the t4x dial, should the signal be heard loud like ,say equal to the r4c . the manual mentioned tweets getting slower and slower as you neared zero beat. Never heard any such tweets. Iam I doing something wrong ,or does something need work ?
> Also if you never plan to use VOX, can the interconnect cables for the vox jacks be left off?
> thanks
> dale wt4t
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14372. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 20:46:46 UTC
From: yash@aol.com
Topic: 14369 Message: 14372

Garey
all the cables were connected ,but no tweets, just the zero beat tone.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@mindspring.com>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Jun 15, 2013 4:44 pm
Subject: Re: [DrakeRadio] set up of a drake c-line

Dale -

The VOX cable must be connected for 'tweets' AND sidetone to work.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>;

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>
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14373. Re: [DrakeRadio] TR7 synthesizer problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 20:56:53 UTC
From: Garey Barrell
Topic: 14370 Message: 14373

Fritz -

Unlocked synthesizer. Check the +24 VDC supply.

If low or missing, check the DC-DC converter transformer to make sure both halves of the "E" core are tightly together and the wire loop is
in place around it.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k6echoecho wrote:
> I am just setting up my shack with my TR7, after a few years of not being on the air with this rig.
> After two years of not using my TR7, it has developed a synthesizer problem, roughly similar as described in an older threat between N8YX and WB2WIK (see below).
>
> My synthesizer error is somewhat more specific as the one described in the N8YX-WB2WIK threat:
>
> If the unit is powered on, the synthesizer sometimes in a reproducible fashion does not follow the band switch but rather ignores band switching.
> Observations:
> 1) It usually switches fine from 21 to 14 to 7 to 3.5.
>
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> To switch to 21 one usually has to overshoot with the band switch to 28. To switch to 3.5 one has to overshoot to 1.5 with the band switch
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> 3) When powered on, the synthesizer never switches to 1.8 or 28.
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>
> I followed N8YXes instructions (below), removed DR7 and Digital Control unit, cleaned it and treated everything with DeOxit.
> I did not resolder as suggested by N8YX, however, the soldering contacts seem fine and my error persists consistently.
> Of course, I also wiggled all the switches that WB2WIK, again the switches seem solid and the problem did not change.
>
>

> Anyone has a recommendation where I could search for a problem next?
>
> Thanks a lot!
>
> vy 73 de
>
> Fritz, K6EE
>
>
>
> --
> N8YX
> 02-18-2009, 01:38 PM
> 1) Obtain the TR7 service manual
> 2) Obtain a bottle of DeOxIt
> 3) If you don't already have one, obtain a board puller or fashion one
> yourself
> 4) Remove wraparound case - 8 screws on bottom of radio
> 5) Locate DR7 readout board. Carefully remove the DR7 board, following
> the procedure in the service manual. Be sure to note where the various
> 5 and 6-pin connectors - along with the 1st mixer and band-select wire
> (blue) go
> 6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
> 7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
> 8) Replace all connectors and wires that you removed in Step 5. Then test rig.
>
> What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.
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> ::Good advice, albeit a fairly complex procedure (mostly removing the cover and unseating all the blind-mate connectors under the DR7 board, which takes a knack).
>
> Before even doing that, you might try rocking these switches:
>
> Bandswitch (front panel)
> Auxiliary Program switch (front panel) Frequency counter switch (slide
> switch, EXT/NORM on rear panel)
>
> If any of those are making crappy contact the frequency counter can act weirdly, as they all have an input to the counter itself.
>
> WB2WIK/6
>

14374. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 21:01:16 UTC
From: Garey Barrell
Topic: 14369 Message: 14374

Actually I don'trecall the C-Line having 'tweets', if Iwant to be 'exactly' on frequency I tune the T-4XC to zero beat, AVC on FAST,and
watch for the meter to swing slowly at the zero point. When you SPOT the T-4XC you should hear a loud tone just like the Calibrator. All
you're doing is keying the low level stages in the transmitter.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Garey
> all the cables were connected ,but no tweets, just the zero beat tone.
> dale wt4t
>
>
>
> -----Original Message-----
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Sat, Jun 15, 2013 4:44 pm
> Subject: Re: [DrakeRadio] set up of a drake c-line
>
>
>
>
>
>
>
> Dale -
>
> The VOX cable must be connected for 'tweets' AND sidetone to work.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>;
>
> yash@... wrote:
>> Just finished with cleaning up and getting my C-line up and running. a couple of questions. checking calibration between the two. set the r4c to 14200 and zero beat the dial , then switched in the t4xc and set on spot. Could hear the calb tone on the receiver

as I zero beat the t4x dial, should the signal be heard loud like ,say equal to the r4c . the manual mentioned tweets getting slower and slower as you neared zero beat. Never heard any such tweets. Iam I doing something wrong ,or does something need work ?
>> Also if you never plan to use VOX, can the interconnect cables for the vox jacks be left off?
>> thanks
>> dale wt4t
>>
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14375. Re: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 23:21:13 UTC
From: Paul Christensen
Topic: 14366 Message: 14375

I'm not sure about mounting clearance but electrically it should work fine although the series meter resistor may need a different value if the internal meter resistance is different than that of the W-4. The board is 3.1" x 1.9" with 1.2" between meter bolt centers.

Paul, W9AC

----- Original Message -----
From: Doug
To: DrakeRadio@yahoogroups.com
Cc: <DrakeRadio@yahoogroups.com>
Sent: Saturday, June 15, 2013 1:50 PM
Subject: Re: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Paul,

Do you have a peak reading board that will function with the MN-2000 tuner meter?

Thanks,

Doug N9XTF

Sent from my iPhone

On Jun 15, 2013, at 12:39, "Paul Christensen" <w9ac@...> wrote:

> Just finished the PCB design of a drop-in PEP board for the W-4 wattmeter. The existing meter wires are moved to the barrier terminal strip and the board mounts directly to the meter's 0.25" terminal bolts. The PEP board is powered from a standard 2.1mm coaxial DC jack or +9V battery. PEP/AVG can be switched right on back of the board -- or for those who aren't concerned about preserving originality, bring out the switch wiring to the front panel - but that requires a drilled hole. Super low DC offset op-amps used with on-board LDO regulator. Full RFI protection on the power and input meter leads. Full-scale trim and peak decay rate are adjustable.
>
> A view of the PCB can be seen on my QRZ.com page, about a quarter of the way down the page.
>
> http://www.qrz.com/db/W9AC
>
> I'm wrapping up a couple other board designs but will have 10 available in about 60 days. I'll have more info on pricing at that time and will post here, assuming no objections from the moderator.
>
> Paul, W9AC
>
> [Non-text portions of this message have been removed]

>
>

PDSWireless
Quick and Simple Internet Access
http://www.pdswireless.com

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[Non-text portions of this message have been removed]

14376. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 23:25:02 UTC
From: Steve Wedge
Topic: 14369 Message: 14376

In SSB mode, or CW?

You only get tweets on SSB.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: yash@aol.com
Sent: Saturday, June 15, 2013 4:46 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] set up of a drake c-line

Garey
all the cables were connected ,but no tweets, just the zero beat tone.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sat, Jun 15, 2013 4:44 pm
Subject: Re: [DrakeRadio] set up of a drake c-line

Dale -

The VOX cable must be connected for 'tweets' AND sidetone to work.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

yash@... wrote:
> Just finished with cleaning up and getting my C-line up and running. a couple of questions. checking calibration between the two. set the r4c to 14200 and zero beat the dial , then switched in the t4xc and set on spot. Could hear the calb tone on the receiver as I zero beat the t4x dial, should the signal be heard loud like ,say equal to the r4c . the manual mentioned tweets getting slower and slower as you neared zero beat. Never heard any such tweets. Iam I doing something wrong ,or does something need work ?
> Also if you never plan to use VOX, can the interconnect cables for the vox jacks be left off?
> thanks
> dale wt4t
>

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14377. FS, SW-4A

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 23:29:13 UTC
From: Steve Wedge
Topic: 14377 Message: 14377

Really nice copper, nice front panel, Cabinet has a few nicks on the rear edge, no scratches. Really nice copper. This one's rare: it has the A-series knob and the PTO has the 5 kHz markings. Most of the ones I see around were from the "B" era.

Contact me off-list for pricing and shipping info.

I'll be testing, cleaning and aligning it this week.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14378. Set Up Drake C-Line - Disable PTO In T4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-15 23:53:03 UTC
From: WD8ARZ
Topic: 14369 Message: 14378

Have a T4XC and a R4C. The previous owner removed the coax cable from the out put of the PTO, and connected where it went to a spare rca phone on the rear panel. The PTO output from the R4C now feeds that location instead. In result is both rigs on the same PTO. Simplifies operation, though it does get rid of split frequency operation. Easy to restore, and I did for testing. All worked as it should when switching options tested. Liked the mod, so put it back.

What the heck is a tweets in relation to the Drakes???

73 from Bill - WD8ARZ
South Bend, Indiana

14379. Re: [DrakeRadio] Set Up Drake C-Line - Disable PTO In T4XC

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 00:15:19 UTC
From: Don Cunningham
Topic: 14369 Message: 14379

Bill,

You are right, NO tweets needed with the C line. That "alignment" only takes place if you use the T4XC in stock configuration with an earlier R4(X) receiver. The carrier oscillators are tied together when the R4C and T4XC are tied together properly.

The only weakness I find in the B Line is that very thing, the "tweets" to keep them transceiving properly. Gets tiresome in this day, but still love the sound of that receiver!!!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3199/6414 - Release Date: 06/15/13

[Non-text portions of this message have been removed]

14380. RE: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 02:05:37 UTC
From: Walter Milton
Topic: 14369 Message: 14380

Dale,

The last time I had my C-line in the operating position. I could hear the tweets when I went to zero beat them. On the upper bands (20 to 10 M) I had to listen very hard. As soon as I get the work bench open I will put the C-line on it so I can align and do some PM on the twins. I will post what I find.

Walt KA2NJF

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of yash@...
Sent: Saturday, June 15, 2013 3:54 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] set up of a drake c-line

Just finished with cleaning up and getting my C-line up and running. a couple of questions. checking calibration between the two. set the r4c to 14200 and zero beat the dial , then switched in the t4xc and set on spot. Could hear the calb tone on the receiver as I zero beat the t4x dial, should the signal be heard loud like ,say equal to the r4c . the manual mentioned tweets getting slower and slower as you neared zero beat. Never heard any such tweets. Iam I doing something wrong ,or does something need work ?
Also if you never plan to use VOX, can the interconnect cables for the vox jacks be left off?
thanks
dale wt4t

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14381. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 02:30:17 UTC
From: Don Cunningham
Topic: 14369 Message: 14381

Dale, Walter and all,

I will correct my previous statement about the "tweets". I was correct that the need to "align" the R4C to the T4XC doesn't exist, as it does with the earlier R4(x)'s as related on pages 3-5 and 3-6. HOWEVER, when spotting, the two together, you can use Garey's version OR the "tweets" in SSB, see pages 3-7 and 3-8. Although I was thinking of the "alignment" of the rigs. When Walter mentioned the spotting, I read further and sure enough, I should have read the rest of the manual, hi.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3199/6414 - Release Date: 06/15/13

[Non-text portions of this message have been removed]

14382. What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 11:15:51 UTC
From: WD8ARZ
Topic: 14369 Message: 14382

Yep, have no idea what a Tweet is .....

73 from Bill WD8ARZ

14383. Re: [DrakeRadio] What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 12:40:10 UTC
From: yash@aol.com
Topic: 14369 Message: 14383

Bill
read the original T4xc Manual ,Drake explains just what a tweet is. How far we have come ,how much we forget.
73
dale wt4t

-----Original Message-----
From: WD8ARZ <wd8arz@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Cc: Don Cunningham <donc@...>
Sent: Sun, Jun 16, 2013 7:15 am
Subject: [DrakeRadio] What Is A TweeT??????

Yep, have no idea what a Tweet is .....

73 from Bill WD8ARZ

[Non-text portions of this message have been removed]

14384. Re: [DrakeRadio] What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 12:59:46 UTC
From: WD8ARZ
Topic: 14369 Message: 14384

Have both manuals setting beside me. Have read them several times so surprised I have missed it. Part of what to expect now that I am retired eh? hi hi

What ever it is, is no big deal then ....

73 from Bill - WD8ARZ

On 6/16/2013 8:40 AM, yash@... wrote:
> Bill
> read the original T4xc Manual ,Drake explains just what a tweet is. How far we have come ,how much we forget.
> 73
> dale wt4t
>
>
>
> -----Original Message-----
> From: WD8ARZ <wd8arz@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Cc: Don Cunningham <donc@...>
> Sent: Sun, Jun 16, 2013 7:15 am
> Subject: [DrakeRadio] What Is A TweeT??????
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>
> Yep, have no idea what a Tweet is .....
>
> 73 from Bill WD8ARZ
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14385. Re: [DrakeRadio] What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 13:07:08 UTC
From: yash@aol.com
Topic: 14369 Message: 14385

Bill
I read the manual on the setup of the C-line a 1/2 dozen times , still confused. Just love the golden years,if I could figure out what I was doing. Now what was I doing?
73
dale wt4t

-----Original Message-----
From: WD8ARZ <wd8arz@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Sun, Jun 16, 2013 8:59 am
Subject: Re: [DrakeRadio] What Is A TweeT??????

Have both manuals setting beside me. Have read them several times so
surprised I have missed it. Part of what to expect now that I am retired
eh? hi hi

What ever it is, is no big deal then ....

73 from Bill - WD8ARZ

On 6/16/2013 8:40 AM, yash@... wrote:
> Bill
> read the original T4xc Manual ,Drake explains just what a tweet is. How far we have come ,how much we forget.
> 73
> dale wt4t
>
>
>
> -----Original Message-----
> From: WD8ARZ <wd8arz@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Cc: Don Cunningham <donc@...>
> Sent: Sun, Jun 16, 2013 7:15 am
> Subject: [DrakeRadio] What Is A TweeT??????
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> Yep, have no idea what a Tweet is .....
>
> 73 from Bill WD8ARZ
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14386. Re: [DrakeRadio] What Is A TweeT - Reason For Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 13:50:46 UTC
From: WD8ARZ
Topic: 14369 Message: 14386

As I had described in a previous email on this topic, the Drake C twins I have were modified before I owned them.

Am familiar with the hetrodyne when zero beating, but had never heard it described the way it was meant here. hi

Note that this pair had been modified such that the only PTO used is the one in the receiver. Its output is fed directly into the T4XC where the internal PTO for that transmitter had been disconnected from.

End result is there is no zero beating required in this arrangement for this pair. Thus no Tweet.

Previous owner was W8RRE, Harry Bedard of Waterford, MI

Thanks again, and 73 from Bill - WD8ARZ

14387. Re: c-line setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 14:26:03 UTC
From: Garey Barrell
Topic: 14387 Message: 14387

Dale -

I think we've generated as much confusion as clarity. I was nohelp, either, that's what I get for going from memory!

What youneed to know is in Chapter III, para 3-14 of the T-4XC manual. What is not mentioned in this paragraph is the the mic MUST be
'hot'. If you use PTT and the mic is internally shorted or switched off in receive, you will hear no'tweets'. This fact about the mic is
alluded to earlier in the manual, but by the time we get to para 3-14, we forgot! Even if you only use PTT, the mic can still be wired to
be 'hot' in receive, as the VOX of the C-Line (ONLY) can be disabled by pushing in on the GAIN control.

When the T-4XC is set to SPOT, the low level stages of the transmitter are keyed, and the receiver is left in ON, i.e., not MUTEd. When you
tune the transmitter PTO near the receive frequency (CALibrator OFF) you will hear a 'rough' tone. This tone is generated by the receive
audio getting into the mic (feedback!) As you get closer to the receiverfrequency, the interval of the tone will lengthen, eventually
resolving into 'tweets' (short bursts of feedback) which will slow to one tweet per secondor less. This means you are within 1 Hz of the
receive frequency. It will be hard to stay that close, as the PTOs will wander slightly from each other, but you caneasily get within 5 Hz
or so, resulting in about 3-5 tweets/second. I think the ANTI VOX signal from the receiver truncates the feedback, making it more like a
blocking oscillator, resulting in the tweets or short 'chirps'.

So... Those are the 'TWEETS'. Partof the confusion here is because this is the method used in the earlier 4-Line sets to align the CAR OSC
and 2nd Mixer LO together for TRANSCEIVE operation. While crystal controlled, they still directly affect the separation of two in
transceive, and the slight dithering of two crystal controlled oscillators can easily reach 20 - 40 Hz or more. This is too much for SSB,
you'll have people complaining you're "OFF FREQUENCY", as if they knew what frequency THEY were on. But that's another rant! Drake
attempted to resolve this problem in the late R-4A period by selecting CAR OSC and 2nd Mixer LO crystals. The crystals were put into 3 (or
4) groups depending upon their temperature drift characteristics (how much and in which direction), and then color coded with a stripe of
paint on the edge of the crystal. This is the letter at the end of many Late R-4A/T-4X and all B-Line serial numbers, Red, Blue, Green, and
'maybe' Yellow. Since units were sold individually, it was the distributor or owner's responsibility to put colors together for best
transceiver operation. Drake exchanged a lot of crystals at no charge to allow those who ended up with mismatched crystals, so the letter on

the s/n is NOT necessarily definitive, you gotta look at the crystal paint stripe!

All this color coding was eliminated in the C-Lineby cabling a sample of the CAR OSC over to the R-4C, via the 'CAR OSC' cable strangely
enough, and using it to sort of 'phase lock' the 3rd Mixer LO in the R-4C. There is no comparator or fancy circuitry, but the two crystal
oscillators will 'symphathize' (new word!) if they are within a few Hz of each other. Eliminates the TRANSCEIVE ALIGN procedure as well.

Finally, on CW, you zero beat the way I described earlier (I'm 98% CW), i.e., SPOT and either zero beat the other station or match the audio
frequency by ear. Matching by ear worked pretty well in the old days, when most everyone generated their CW signal by shifting the CAR OSC
into the LSB filter passband. Nowadays there is no standard and some generate CW in the USB offset, meaning if you match tones you 'could'
be off by twice the tone you like. I usually use around 400 Hz, so I'm off less than a kHz!If they can't find me when I'm that close ...

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Garey <#>
> Iam <#> totally confused after reading all the comments on my question about getting the c <#>-line dead on with each other. I reread the
> manual again ,still confused.
> !. I zero beat the dial on the r4c <#> using the calibrator.. worked fine.
> 2. I put the t4xc <#> on spot , calb <#>. still on the receiver and dialed in the calb <#> on the dial of the t4xc <#> and set the dial to
> a zero beat. the tone level was VERY low ,but could hear it. worked fine.
> 3. why is this all necessary when the C <#>-line is coupled to each other ,via the carrier osc <#>.? I thought that was the whole point of
> the c <#>-line.
>
> Is my set up procedure wrong? should I be doing something different? And like I said in the first post ,NEVER heard any tweets
> anywhere ,just the calb. tone. on both rigs.
>
> 73
> dale wt4t

14388. Re: [DrakeRadio] What Is A TweeT - Reason For Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 14:31:41 UTC
From: Garey Barrell
Topic: 14369 Message: 14388

Bill -

No accounting for some mods..... He should have just bought a TR-4C!

This might have made some little sense if you wanted transceive ONLY with an A or B pair, or if the T-4XC PTO died?!

Unless this arrangement has some special meaning for you, I would suggest putting them back to normal and having the biggest advantage of
the twins, i.e., separate control _when you want it_. Withthe C-Line you always get perfect transceive _when you want it_, and separate
when you don't, just by turning the switch....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

WD8ARZ wrote:
> As I had described in a previous email on this topic, the Drake C twins
> I have were modified before I owned them.
>
> Am familiar with the hetrodyne when zero beating, but had never heard it
> described the way it was meant here. hi
>
> Note that this pair had been modified such that the only PTO used is the
> one in the receiver. Its output is fed directly into the T4XC where the
> internal PTO for that transmitter had been disconnected from.
>
> End result is there is no zero beating required in this arrangement for
> this pair. Thus no Tweet.
>
> Previous owner was W8RRE, Harry Bedard of Waterford, MI
>
> Thanks again, and 73 from Bill - WD8ARZ
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> Yahoo! Groups Links
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14389. Re: [DrakeRadio] Re: c-line setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 14:32:53 UTC
From: WD8ARZ
Topic: 14387 Message: 14389

Now that is the kind of feedback I have been used to seeing from this group. Thank you so much Garey.

Because of the modification by the previous owner of this C pair, I was not having to sync the two.

Thank You!

73 from Bill - WD8ARZ

On 6/16/2013 10:26 AM, Garey Barrell wrote:
> Dale -
>
> I think we've generated as much confusion as clarity. I was nohelp, either, that's what I get for going from memory!
>
> What youneed to know is in Chapter III, para 3-14 of the T-4XC manual. What is not mentioned in this paragraph is the the mic MUST be
> 'hot'. If you use PTT and the mic is internally shorted or switched off in receive, you will hear no'tweets'. This fact about the mic is
> alluded to earlier in the manual, but by the time we get to para 3-14, we forgot! Even if you only use PTT, the mic can still be wired to
> be 'hot' in receive, as the VOX of the C-Line (ONLY) can be disabled by pushing in on the GAIN control.
>
> When the T-4XC is set to SPOT, the low level stages of the transmitter are keyed, and the receiver is left in ON, i.e., not MUTEd. When you
> tune the transmitter PTO near the receive frequency (CALibrator OFF) you will hear a 'rough' tone. This tone is generated by the receive
> audio getting into the mic (feedback!) As you get closer to the receiverfrequency, the interval of the tone will lengthen, eventually
> resolving into 'tweets' (short bursts of feedback) which will slow to one tweet per secondor less. This means you are within 1 Hz of the
> receive frequency. It will be hard to stay that close, as the PTOs will wander slightly from each other, but you caneasily get within 5 Hz
> or so, resulting in about 3-5 tweets/second. I think the ANTI VOX signal from the receiver truncates the feedback, making it more like a
> blocking oscillator, resulting in the tweets or short 'chirps'.
>
> So... Those are the 'TWEETS'. Partof the confusion here is because this is the method used in the earlier 4-Line sets to align the CAR OSC
> and 2nd Mixer LO together for TRANSCEIVE operation. While crystal controlled, they still directly affect the separation of two in
> transceive, and the slight dithering of two crystal controlled oscillators can easily reach 20 - 40 Hz or more. This is too much for SSB,
> you'll have people complaining you're "OFF FREQUENCY", as if they knew what frequency

THEY were on. But that's another rant! Drake
> attempted to resolve this problem in the late R-4A period by selecting CAR OSC and 2nd Mixer LO crystals. The crystals were put into 3 (or
> 4) groups depending upon their temperature drift characteristics (how much and in which direction), and then color coded with a stripe of
> paint on the edge of the crystal. This is the letter at the end of many Late R-4A/T-4X and all B-Line serial numbers, Red, Blue, Green, and
> 'maybe' Yellow. Since units were sold individually, it was the distributor or owner's responsibility to put colors together for best
> transceiver operation. Drake exchanged a lot of crystals at no charge to allow those who ended up with mismatched crystals, so the letter on
> the s/n is NOT necessarily definitive, you gotta look at the crystal paint stripe!
>
> All this color coding was eliminated in the C-Lineby cabling a sample of the CAR OSC over to the R-4C, via the 'CAR OSC' cable strangely
> enough, and using it to sort of 'phase lock' the 3rd Mixer LO in the R-4C. There is no comparator or fancy circuitry, but the two crystal
> oscillators will 'symphathize' (new word!) if they are within a few Hz of each other. Eliminates the TRANSCEIVE ALIGN procedure as well.
>
> Finally, on CW, you zero beat the way I described earlier (I'm 98% CW), i.e., SPOT and either zero beat the other station or match the audio
> frequency by ear. Matching by ear worked pretty well in the old days, when most everyone generated their CW signal by shifting the CAR OSC
> into the LSB filter passband. Nowadays there is no standard and some generate CW in the USB offset, meaning if you match tones you 'could'
> be off by twice the tone you like. I usually use around 400 Hz, so I'm off less than a kHz!If they can't find me when I'm that close ...
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> yash@... wrote:
>> Garey <#>
>> Iam <#> totally confused after reading all the comments on my question about getting the c <#>-line dead on with each other. I reread the
>> manual again ,still confused.
>> !. I zero beat the dial on the r4c <#> using the calibrator.. worked fine.
>> 2. I put the t4xc <#> on spot , calb <#>. still on the receiver and dialed in the calb <#> on the dial of the t4xc <#> and set the dial to
>> a zero beat. the tone level was VERY low ,but could hear it. worked fine.
>> 3. why is this all necessary when the C <#>-line is coupled to each other ,via the carrier osc <#>.? I thought that was the whole point of
>> the c <#>-line.
>>
>> Is my set up procedure wrong? should I be doing something different? And like I said in the first post ,NEVER heard any tweets

>> anywhere ,just the calb. tone. on both rigs.
>>
>> 73
>> dale wt4t

14390. Re: [DrakeRadio] Re: c-line setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 15:11:45 UTC
From: Don Cunningham
Topic: 14387 Message: 14390

See there, Bill, that is EXACTLY what I was trying to say. Our friend Garey is just so much better than I at getting technical while remaining SO understandable. He even invents good words when others fail :-)

Nice job once again, Garey!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3199/6415 - Release Date: 06/16/13

[Non-text portions of this message have been removed]

14391. Re: [DrakeRadio] Re: c-line setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 15:46:14 UTC
From: barcand@...
Topic: 14387 Message: 14391

I still think Garey was either a college level instructor in this life or a former one! ALWAYS makes everything complicated understandable. Great job, Garey!!

Bernie in ND
WD0GMD

On Sun, June 16, 2013 10:11 am, Don Cunningham wrote:
> See there, Bill, that is EXACTLY what I was trying to say. Our friend
> Garey is just so much better than I at getting technical while remaining
> SO understandable. He even invents good words when others fail :-)
>
> Nice job once again, Garey!!
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3345 / Virus Database: 3199/6415 - Release Date: 06/16/13
>
>
> [Non-text portions of this message have been removed]
>
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14392. Re: [DrakeRadio] Drake W-4 Wattmeter PEP Amplifier Board

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 16:32:16 UTC
From: Jim Shorney
Topic: 14366 Message: 14392

Nice work, Paul. Is it "fast" enough to catch peaks from ALC overshoot?

http://www.w8ji.com/alc_exciter_power_overshoot.htm

73

-Jim
NU0C

On Sat, 15 Jun 2013 12:39:20 -0400, Paul Christensen wrote:

>Just finished the PCB design of a drop-in PEP board for the W-4 wattmeter. The existing meter wires are moved to the barrier terminal strip and the board mounts directly to the meter's 0.25" terminal bolts. The PEP board is powered from a standard 2.1mm coaxial DC jack or +9V battery. PEP/AVG can be switched right on back of the board -- or for those who aren't concerned about preserving originality, bring out the switch wiring to the front panel - but that requires a drilled hole. Super low DC offset op-amps used with on-board LDO regulator. Full RFI protection on the power and input meter leads. Full-scale trim and peak decay rate are adjustable.
>
>A view of the PCB can be seen on my QRZ.com page, about a quarter of the way down the page.
>
>http://www.qrz.com/db/W9AC
>
>I'm wrapping up a couple other board designs but will have 10 available in about 60 days. I'll have more info on pricing at that time and will post here, assuming no objections from the moderator.
>
>Paul, W9AC
>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14393. Re: [DrakeRadio] What Is A TweeT - Reason For Question

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 16:45:11 UTC
From: Dan Galligan
Topic: 14369 Message: 14393

I don't know that I've ever heard the tweet, on my C Line, but I have always preferred my B twins, over the C's. However, the thought of a Drake user, not knowing what the tweet is, seems foreign, to me. I've just run B twins for so long, that it seems automatic, to know what the tweets are, and how you listen for them "slow down" or elongate, as you get it onto frequency. I guess, though, that if you never heard it, it would be difficult, to understand.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

On Jun 16, 2013, at 7:31, Garey Barrell <k4oah@...> wrote:

> Bill -
>
> No accounting for some mods..... He should have just bought a TR-4C!
>
> This might have made some little sense if you wanted transceive ONLY with an A or B pair, or if the T-4XC PTO died?!
>
> Unless this arrangement has some special meaning for you, I would suggest putting them back to normal and having the biggest advantage of
> the twins, i.e., separate control _when you want it_. Withthe C-Line you always get perfect transceive _when you want it_, and separate
> when you don't, just by turning the switch....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> WD8ARZ wrote:

>> As I had described in a previous email on this topic, the Drake C twins
>> I have were modified before I owned them.
>>
>> Am familiar with the hetrodyne when zero beating, but had never heard it
>> described the way it was meant here. hi
>>
>> Note that this pair had been modified such that the only PTO used is the
>> one in the receiver. Its output is fed directly into the T4XC where the
>> internal PTO for that transmitter had been disconnected from.
>>
>> End result is there is no zero beating required in this arrangement for
>> this pair. Thus no Tweet.
>>
>> Previous owner was W8RRE, Harry Bedard of Waterford, MI
>>
>> Thanks again, and 73 from Bill - WD8ARZ
>>
>>
>> ------------------------------------
>>
>> Yahoo! Groups Links
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14394. Re: TR7 synthesizer problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 17:32:59 UTC
From: k6echoecho
Topic: 14370 Message: 14394

Garey,

Thanks so much for these hints! Will check these points and report back. 73 Fritz

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Fritz -
>
> Unlocked synthesizer. Check the +24 VDC supply.
>
> If low or missing, check the DC-DC converter transformer to make sure both halves of the "E" core are tightly together and the wire loop is
> in place around it.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> k6echoecho wrote:
> > I am just setting up my shack with my TR7, after a few years of not being on the air with this rig.
> > After two years of not using my TR7, it has developed a synthesizer problem, roughly similar as described in an older threat between N8YX and WB2WIK (see below).
> >
> > My synthesizer error is somewhat more specific as the one described in the N8YX-WB2WIK threat:
> >
> > If the unit is powered on, the synthesizer sometimes in a reproducible fashion does not follow the band switch but rather ignores band switching.
> > Observations:
> > 1) It usually switches fine from 21 to 14 to 7 to 3.5.
> >
> > 2) There is hysteresis in how the synthesizer follows the band switching:
> > To switch to 21 one usually has to overshoot with the band switch to 28. To switch to 3.5 one has to overshoot to 1.5 with the band switch
> >
> > 3) When powered on, the synthesizer never switches to 1.8 or 28.
> >
> > 4) The synthesizer sets ALWAYS correctly to any band set by the band switch (also 28 or 1.5!) after switching the transceiver off and on again.
> >
> > I followed N8YXes instructions (below), removed DR7 and Digital Control unit, cleaned

it and treated everything with DeOxit.
> > I did not resolder as suggested by N8YX, however, the soldering contacts seem fine and my error persists consistently.
> > Of course, I also wiggled all the switches that WB2WIK, again the switches seem solid and the problem did not change.
> >
> >
> > Anyone has a recommendation where I could search for a problem next?
> >
> > Thanks a lot!
> >
> > vy 73 de
> >
> > Fritz, K6EE
> >
> >
> >
> > ---
> > N8YX
> > 02-18-2009, 01:38 PM
> > 1) Obtain the TR7 service manual
> > 2) Obtain a bottle of DeOxIt
> > 3) If you don't already have one, obtain a board puller or fashion one
> > yourself
> > 4) Remove wraparound case - 8 screws on bottom of radio
> > 5) Locate DR7 readout board. Carefully remove the DR7 board, following
> > the procedure in the service manual. Be sure to note where the various
> > 5 and 6-pin connectors - along with the 1st mixer and band-select wire
> > (blue) go
> > 6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
> > 7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
> > 8) Replace all connectors and wires that you removed in Step 5. Then test rig.
> >
> > What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.
> > WB2WIK
> > 02-18-2009, 03:59 PM
> > 1) Obtain the TR7 service manual
> > 2) Obtain a bottle of DeOxIt
> > 3) If you don't already have one, obtain a board puller or fashion one
> > yourself
> > 4) Remove wraparound case - 8 screws on bottom of radio
> > 5) Locate DR7 readout board. Carefully remove the DR7 board, following
> > the procedure in the service manual. Be sure to note where the various
> > 5 and 6-pin connectors - along with the 1st mixer and band-select wire

> > (blue) go
> > 6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
> > 7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
> > 8) Replace all connectors and wires that you removed in Step 5. Then test rig.
> >
> > What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.
> >
> > ::Good advice, albeit a fairly complex procedure (mostly removing the cover and unseating all the blind-mate connectors under the DR7 board, which takes a knack).
> >
> > Before even doing that, you might try rocking these switches:
> >
> > Bandswitch (front panel)
> > Auxiliary Program switch (front panel) Frequency counter switch (slide
> > switch, EXT/NORM on rear panel)
> >
> > If any of those are making crappy contact the frequency counter can act weirdly, as they all have an input to the counter itself.
> >
> > WB2WIK/6
> >
>

14395. Re: [DrakeRadio] set up of a drake c-line

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 17:54:51 UTC
From: Steve Wedge
Topic: 14369 Message: 14395

Actually, if you are running them in SPOT and are in SSB mode, you should hear the tweets, because spotting by definition puts the transmitter and receiver into SEPARATE mode - I.e., the CAR OSC signal is not being used to synch the two sets.

Steve Wedge, W1ES/4

Sent from my iPad: please don't laugh too hard at any autocorrect grammar changes :)

On Jun 15, 2013, at 10:05 PM, "Walter Milton" <wmilton@...> wrote:

> Dale,
>
> The last time I had my C-line in the operating position. I could hear the
> tweets when I went to zero beat them. On the upper bands (20 to 10 M) I
> had to listen very hard. As soon as I get the work bench open I will put
> the C-line on it so I can align and do some PM on the twins. I will post
> what I find.
>
> Walt KA2NJF
>
> From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On
> Behalf Of yash@...
> Sent: Saturday, June 15, 2013 3:54 PM
> To: DrakeRadio@yahoogroups.com
> Subject: [DrakeRadio] set up of a drake c-line
>
> Just finished with cleaning up and getting my C-line up and running. a
> couple of questions. checking calibration between the two. set the r4c to
> 14200 and zero beat the dial , then switched in the t4xc and set on spot.
> Could hear the calb tone on the receiver as I zero beat the t4x dial,
> should the signal be heard loud like ,say equal to the r4c . the manual
> mentioned tweets getting slower and slower as you neared zero beat. Never
> heard any such tweets. Iam I doing something wrong ,or does something need
> work ?
> Also if you never plan to use VOX, can the interconnect cables for the vox
> jacks be left off?
> thanks
> dale wt4t
>
> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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[Non-text portions of this message have been removed]

14396. Why I Didnt Know About 'Tweet"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 18:03:32 UTC
From: WD8ARZ
Topic: 14369 Message: 14396

Hello Dan, I can imagine it would be hard for you under your circumstances.

In my case I inherited the Drake C line, the only Drakes I have ever had. They were modified before I received them to use a single PTO from the receiver directly to an add on RCA phone connector on the transmitter that went directly to where the transmitter PTO 'had been' connected to. Thus there was never a need to sync the transmitter and receiver to the same frequency. The transmitter PTO was not used by the transmitter.

Out of curiosity I did undo the mode and verified that the T-4XC Transceive switch did function as intended. Did follow the written directions in the manual. Did hear the feedback ... which as far as I was concerned was zero beating process that did sound like feedback. Decided with my Air Force Jet and age damaged ears, and the drift in both rigs crystals and pto's, the best stable tracking for me was with the mod that had been done, so I restored the mod.

Have no plans for split frequency operation with the Drake C line so it is perfectly fine with me and easier to use. Have other gear I can use in split mode for all transmit receive modes / combinations.

In all the years I have been in this group, and I of course have not read all the emails, this past week is the first time ever I have heard the term tweet used. So the question was very valid in my mind.

My HW-7 and other rigs, had a hytrodyne zero beat method I preferred over the feedback version .... hi hi

Love AM, and operate from the base and mobile. The mobile uses a TS-480HX rig that has high temp duty cycle, and is very reliable rig. Uses upward modulation. AM carrier with no modulation is 50 watts, and with modulation hits 100 watts. Great AM performer on the base or mobile. The only 200 watt SSB mobile rig I am aware of.

Best of the Fathers Day to All, and 73 from Bill - WD8ARZ in South Bend, Indiana - Retired

On 6/16/2013 12:45 PM, Dan Galligan wrote:
> I don't know that I've ever heard the tweet, on my C Line, but I have always preferred my B twins, over the C's. However, the thought of a Drake user, not knowing what the tweet is, seems foreign, to me. I've just run B twins for so long, that it seems automatic, to know what the tweets are, and how you listen for them "slow down" or elongate, as you get it onto frequency. I guess, though, that if you never heard it, it would be difficult, to understand.
>
> 73,

> Dan
> W3RXO/W6
> Evening Shade, OK
> EM25no

14397. Re: [DrakeRadio] Why I Didnt Know About 'Tweet"

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-16 18:23:19 UTC
From: Dan Galligan
Topic: 14369 Message: 14397

Bill,
I "get" what you're saying. It's just that as much as I've used two different B Line sets, it seems unfathomable, that anyone who is a Drake user, wouldn't know, until you consider, that there are lots of folks, who have only ever used transceivers.
I certainly didn't mean to sound disparaging, it is just that foreign of a concept, to me, that is seemed odd, that so many folks, were saying that they didn't know what the tweets were. I guess that I always thought is was something that ALL Drake users were familiar with, but I was admitting that I was wrong.

And, I also want to wish all the fathers out there, a Happy Father's Day!

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

On Jun 16, 2013, at 11:03, WD8ARZ <wd8arz@...> wrote:

> Hello Dan, I can imagine it would be hard for you under your circumstances.
>
> In my case I inherited the Drake C line, the only Drakes I have ever
> had. They were modified before I received them to use a single PTO from
> the receiver directly to an add on RCA phone connector on the
> transmitter that went directly to where the transmitter PTO 'had been'
> connected to. Thus there was never a need to sync the transmitter and
> receiver to the same frequency. The transmitter PTO was not used by the
> transmitter.
>
> Out of curiosity I did undo the mode and verified that the T-4XC
> Transceive switch did function as intended. Did follow the written
> directions in the manual. Did hear the feedback ... which as far as I
> was concerned was zero beating process that did sound like feedback.
> Decided with my Air Force Jet and age damaged ears, and the drift in
> both rigs crystals and pto's, the best stable tracking for me was with
> the mod that had been done, so I restored the mod.
>

> Have no plans for split frequency operation with the Drake C line so it
> is perfectly fine with me and easier to use. Have other gear I can use
> in split mode for all transmit receive modes / combinations.
>
> In all the years I have been in this group, and I of course have not
> read all the emails, this past week is the first time ever I have heard
> the term tweet used. So the question was very valid in my mind.
>
> My HW-7 and other rigs, had a hytrodyne zero beat method I preferred
> over the feedback version .... hi hi
>
> Love AM, and operate from the base and mobile. The mobile uses a
> TS-480HX rig that has high temp duty cycle, and is very reliable rig.
> Uses upward modulation. AM carrier with no modulation is 50 watts, and
> with modulation hits 100 watts. Great AM performer on the base or
> mobile. The only 200 watt SSB mobile rig I am aware of.
>
> Best of the Fathers Day to All, and 73 from Bill - WD8ARZ in South Bend,
> Indiana - Retired
>
> On 6/16/2013 12:45 PM, Dan Galligan wrote:
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>>
>> 73,
>> Dan
>> W3RXO/W6
>> Evening Shade, OK
>> EM25no
>
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> ------------------------------------
>
> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14398. C-LINE UP AND RUNNING

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 01:33:19 UTC
From: yash@aol.com
Topic: 14398 Message: 14398

Thanks to Garey and everyone else who answered my questions about sync. my C-line. Put the twins on the air today, first contact was mexico,city on 20. Had a nice 20 minute chat, he was running a flex 5000a. and said the c-line was near dead on frequency and the signal on the scope very good. He played back some audio he recorded ,audio was fine also. Had a second contact in Belize, His report was just fine also. the c-line is VERY stable after about 10 minutes. Thanks again to all , looking forward to using the twins
73
dale wt4t

[Non-text portions of this message have been removed]

14399. Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 00:00:26 UTC
From: kd4e2001
Topic: 14399 Message: 14399

A Drake TR7 in unknown operating condition followed me home from Dayton & I am just now getting a look at it.

I've wired a DC cable to the keyed 4-pin connector and jumped pins 1 & 2 on the multi-pin connector that normally goes to the matching PS7 supply.

There is no response whatsoever when I turn ON the front panel switch.

Do I recall correctly that there is an internal fuse?

Thanks!

David

14400. RE: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 02:15:16 UTC
From: Keith R. Erickson
Topic: 14399 Message: 14400

When using a DC Cable, you shouldn't have to jump any pins on the Jones Multipoint connector.

Keith, K0GNW

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of kd4e2001
Sent: Sunday, June 16, 2013 7:00 PM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Drake TR7 - DC Power Problem

A Drake TR7 in unknown operating condition followed me home from Dayton & I am just now getting a look at it.

I've wired a DC cable to the keyed 4-pin connector and jumped pins 1 & 2 on the multi-pin connector that normally goes to the matching PS7 supply.

There is no response whatsoever when I turn ON the front panel switch.

Do I recall correctly that there is an internal fuse?

Thanks!

David

[Non-text portions of this message have been removed]

14401. Drake 2C + TX4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 02:05:54 UTC
From: donaldsinger77
Topic: 14401 Message: 14401

Have had a 2C which is good condition and have an opportunity to pick up a good TX4C from an estate of a friend.....is it fairly straight forward to hook these up to work together, or should I get an R4C rcvr?

Thanks

Don KF7DS

14402. Re: [DrakeRadio] Drake 2C + TX4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 02:29:50 UTC
From: Garey Barrell
Topic: 14401 Message: 14402

Don -

They will work together just fine. If you wish to have sidetone, you will need a small output transformer (4-8 ohms to 3-5k ohms), but other
than that just plug and play.

The R-4C is a considerably better receiver, with Passband Tuning. The R-4C also has sharper crystal filters as opposed to the Passband with
L/C filters in the 2-C. Also room for more auxiliary band crystals. I personally prefer the 2-C for day-to-day ham operations, but it is
severely limited without the adjustable Passband tuning.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

donaldsinger77 wrote:
> Have had a 2C which is good condition and have an opportunity to pick up a good TX4C from an estate of a friend.....is it fairly straight forward to hook these up to work together, or should I get an R4C rcvr?
>
> Thanks
>
> Don KF7DS
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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14403. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 02:58:55 UTC
From: Jim Shorney
Topic: 14399 Message: 14403

Hi David,

As has already been mentioned, you don't need the jumper on 1 and 2. Those are one section of the power switch, and control AC to the Drake power supply only.

Yes, there is an internal fuse. It is on the right side wall, very close to the front of the radio. It is in the low current +13.7V rail that powers everything in the radio except the PA deck. Replace with the same type and size if it is open. Be careful not to bump the nearby fixed passband pots on the DC-DC converter PCB.

There is also the other half of the power switch that switches the low current 13.7V. It may be open or intermittent, they do go bad sometimes. If the fuse is good, excercise the switch a few times to see if it comes on.

Another possibility is grunge or corrosion on the 4 pin power connector on the rear panel.

73

-Jim
NU0C

On Mon, 17 Jun 2013 00:00:26 -0000, kd4e2001 wrote:

>A Drake TR7 in unknown operating condition followed me home from Dayton & I am just now getting a look at it.
>
>I've wired a DC cable to the keyed 4-pin connector and jumped pins 1 & 2 on the multi-pin connector that normally goes to the matching PS7 supply.
>
>There is no response whatsoever when I turn ON the front panel switch.
>
>Do I recall correctly that there is an internal fuse?
>
>Thanks!
>
>David
>
>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14404. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 03:15:19 UTC
From: qrv@kd4e.com
Topic: 14399 Message: 14404

> When using a DC Cable, you shouldn't have to jump any pins on the
> Jones Multipoint connector.
> Keith, K0GNW

Thanks, a bit of bad intel online.

> Yes, there is an internal fuse. It is on the right side wall, very close to the
> front of the radio. It is in the low current +13.7V rail that powers everything
> in the radio except the PA deck. Replace with the same type and size if it is
> open. Be careful not to bump the nearby fixed passband pots on the DC-DC
> converter PCB.

OK. Will check tomorrow.

> There is also the other half of the power switch that switches the low current
> 13.7V. It may be open or intermittent, they do go bad sometimes. If the fuse is
> good, excercise the switch a few times to see if it comes on.

Thanks!

> Another possibility is grunge or corrosion on the 4 pin power connector on the
> rear panel.

That area is very clean and the connector I acquired was NOS.

Hopefully nothing more serious than the fuse ... it was paired
with a PS7 which reportedly had very low voltage output ... I
re-sold it as-is at Dayton.

> 73
> -Jim
> NU0C

--

Thanks! & 73, KD4E.com

David Colburn - Nevils, Georgia USA

Search with: duckduckgo.com

Android for Hams: groups.yahoo.com/group/hamdroid
Creative Tech: groups.yahoo.com/group/ham-macguyver
Raspi Alternative: groups.yahoo.com/group/beagleboneblack/

Restored to design-spec at Heaven's gate 1Cor15:22

14405. Re: [DrakeRadio] R-4

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 13:56:16 UTC
From: Garey Barrell
Topic: 12324 Message: 14405

Steve -

Any chance the 6:1 drive here could be useful? About half-way down....

<http://www.midnightscience.com/catalog5.html#part2>

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Thanks, Garey.
>
> Let me know if you'd like any pics of the innards for your files. This one looks like it's pretty clean but is not functioning. At any rate, I'll be doing my usual clean-up on it, so I'll have lots of opportunities to photograph it with my DSLR and some macro lenses.
>
> I figured there weren't nearly as many made as the A's, B's or C's and what you've said confirms that.
>
> Hoping the PO doesn't abuse this one like it just did to an R-4B I just sold...
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Monday, March 04, 2013 11:32 AM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] R-4
>
>
>
> Weeellll, not exactly! :-)
>
> 1. Tube PTO!
>
> 2. INJ jack 'inside' on top of chassis.

>
> 3. Built Oct 64 - Oct 65
>
> 4. Approx 2000 built
>
> 5. VR tube added Feb 65
>
> 6. 12BZ6 RF Amp
>
> 7. Provision for crystal control. (Crystal at 5.455 MHzand 11.1 MHz above desired frequency)
>
> That's all that comes to mind.....
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
>
>
> Steve Wedge wrote:
>> Hi, Gang -
>>
>> I'm awaiting my latest eBay find: an original R-4. Going to 'HFN's website, I can't find much info on them but I seem to recall they were made between 1959 and '61. Am I close?
>>
>> The big differences I notice right off are the concentric AF/RF GAIN, no INJ jack and, of course, no reduction drive for the PRESELECTOR. I've heard it's roughly the same as the 13-tube R-4A otherwise. Any other tidbits?
>>
>> 73,
>>
>> Steve Wedge, W1ES/4
>>
>> Time flies like an arrow; fruit flies like a banana.
>>
>>
>> All my computers have my signature with various pearls of wisdom appended thereto.
>>
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>> [Non-text portions of this message have been removed]
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14406. Tx audio response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 14:31:19 UTC
From: David Winfree
Topic: 14406 Message: 14406

It's very easy now to have a small, portable, zero cost, tunable audio source. In my case, its a iPhone with the Tone Generator Ap. I'm not fooled into thinking the wideband source is linear through the tiny stereo transducers, however. BUT, it does give a somewhat reasonable sound down to a couple hundred Hz and up to past 20,000 Hz as heard by my middle school age daughters. My limit is far lower, unfortunately at around 12kHz. Even for just that test, it makes for some interesting discussion.
But on to the Drake test.

I use a aviation headset of dubious response. Actually have two to choose from. To work into the drake, it took a step-up audio transformer, coupling cap, RF bypass cap, battery, and not much more. None of it bench tested. So, now one can envision a test, where the smart phone is held near the mic, the Tx loaded into a dummy load, and one watches Ip vs audio freq. The T4x is speced at 300 to 2600Hz at 6db down points. I get closer to 600 to 2500Hz at around 1/2 Ip. A TS680 on hand does about 600 to 2700Hz. That is, my plate current falls to about half of max at the low and high audio freq limit. Now I know I'm missing the 300 to 600Hz portion of audio, not sure how important that is. I have received a signal report of "missing highs", which I can now quantify. I noticed the Kenwood has a significant peak at 2500Hz, with the rolloff at 2700Hz.

Has anyone had similar findings on their Drake rig? I'd specifically like to know of Shure 444 or vintage Astatic and other mics response WITH THE Tx attached.
cheers, WB4SPT

14407. Re: Drake 2C + TX4C

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 14:56:15 UTC
From: donaldsinger77
Topic: 14401 Message: 14407

Garey:

Thanks for the quick reply. Yes, I like the 2C for just turning it on to listen to the bands...a bit difficult to separate out signals when it becomes crowded, but overall the tone of the sound is terrific.

Am looking at an R4C.

Best
Don KF7DS

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Don -
>
> They will work together just fine. If you wish to have sidetone, you will need a small output transformer (4-8 ohms to 3-5k ohms), but other
> than that just plug and play.
>
> The R-4C is a considerably better receiver, with Passband Tuning. The R-4C also has sharper crystal filters as opposed to the Passband with
> L/C filters in the 2-C. Also room for more auxiliary band crystals. I personally prefer the 2-C for day-to-day ham operations, but it is
> severely limited without the adjustable Passband tuning.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> donaldsinger77 wrote:
> > Have had a 2C which is good condition and have an opportunity to pick up a good TX4C from an estate of a friend.....is it fairly straight forward to hook these up to work together, or should I get an R4C rcvr?
> >
> > Thanks
> >
> > Don KF7DS
> >
> >
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> >
> > Yahoo! Groups Links

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14408. Re: [DrakeRadio] Tx audio response

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-17 19:14:02 UTC
From: Richard Knoppow
Topic: 14406 Message: 14408

----- Original Message -----
From: "David Winfree" <dmw11038@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Monday, June 17, 2013 7:31 AM
Subject: [DrakeRadio] Tx audio response

> It's very easy now to have a small, portable, zero cost,
> tunable audio source. In my case, its a iPhone with the
> Tone Generator Ap. I'm not fooled into thinking the
> wideband source is linear through the tiny stereo
> transducers, however. BUT, it does give a somewhat
> reasonable sound down to a couple hundred Hz and up to
> past 20,000 Hz as heard by my middle school age daughters.
> My limit is far lower, unfortunately at around 12kHz.
> Even for just that test, it makes for some interesting
> discussion.
> But on to the Drake test.
>
> I use a aviation headset of dubious response. Actually
> have two to choose from. To work into the drake, it took
> a step-up audio transformer, coupling cap, RF bypass cap,
> battery, and not much more. None of it bench tested. So,
> now one can envision a test, where the smart phone is held
> near the mic, the Tx loaded into a dummy load, and one
> watches Ip vs audio freq. The T4x is speced at 300 to
> 2600Hz at 6db down points. I get closer to 600 to 2500Hz
> at around 1/2 Ip. A TS680 on hand does about 600 to
> 2700Hz. That is, my plate current falls to about half of
> max at the low and high audio freq limit. Now I know I'm
> missing the 300 to 600Hz portion of audio, not sure how
> important that is. I have received a signal report of
> "missing highs", which I can now quantify. I noticed the
> Kenwood has a significant peak at 2500Hz, with the rolloff
> at 2700Hz.
>
> Has anyone had similar findings on their Drake rig? I'd
> specifically like to know of Shure 444 or vintage Astatic
> and other mics response WITH THE Tx attached.
> cheers, WB4SPT
>
If I understand this right you are using the phone as
an acoustic source feeding it through the microphone on the
headset. I don't quite understand whant the transformer
etc, is for. Are you feeding the oscillator directly into
the transmitter?

I think you have to measure the response of the transmitter directly. Also, do you have a separate receiver you can listen to the transmitter on? Preferably one with a rather wide IF. Use decent headphones and have someone else talk.
My T-4XB may be different than your transmitter but I've tested both by listening on a receiver while it was on a dummy load and from signal reports. The highs seem fine. My usual microphone is an Electro-Voice 664. I've compared this to a D-104 and a couple of others and generally it gets the best report. Its hard to beleive there is a real difference among microphones when going through such a frequency limited system as these transmitters but there seems to be. BTW, I hear a lot of bad audio on the air coming from rice boxes with lots of adjustments. Its fun to hear a couple of folks poking at them.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14409. Re: [Drake] Drake L75 knowledge??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-18 16:13:31 UTC
From: Garey Barrell
Topic: 14409 Message: 14409

Dave -

If you could sub the tube, I think I'd do that first. The 0.82 ohm resistor is a 'FUSE' for the HV, and ashort will vaporize it! It should
only be replaced with the same type and value of resistor. They're available fromHarbach Electronics (RES400) in a pack of five (5) for
about$6.

The fact that the resistor didn't blow immediately indicates that the short isn't (or at least 'wasn't' permanent), re-enforcing the tube
problem. The supply is 'probably' ok, but most likely needs new caps, just due to age.

If I'm all wet, one of the amp guys needs to SPEAK UP!! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dave Edwards wrote:
> I could rework the power supply, and try again....this would tell me if my tube is good.
> But then, I could mess up my supply....again!!!
>
> I could rework the power supply AND replace the single 3-500....but then I'll never know if
> my tube was really bad.
>
> But, I guess to have a working, trouble-free amp....the second choice would be the correct one.
> Crud!!!
>
> Thanks for the tips Garey!
>
> PS...I'll eventually pick up some of those CD's
>
> I own a lot of Drake stuff!
>
> Ever think of putting ALL the supplement CD's....perhaps on a thumb drive for sale??
>
> .....Dave
>
>
>
>

> On 6/18/2013 10:50 AM, Garey Barrell wrote:
>> Dave -
>>
>> The power supply probably needs rework, but this sounds more like tube 'flashover'.
>>
>> There are others on here moreknowledgeable, but that would be my guess.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> Dave Edwards wrote:
>>> I know I might be hard pressed to even find someone that owns one of these, but looking for advice.
>>>
>>> Blew fuse a few times...I put new fuses in.
>>> Then, some cracking sounds, finally, HV shut off.
>>> Opened it up to find the .82 ohm resistor (fuse) blown.
>>>
>>> Replaced the resistor, and tried again.
>>> Full output...all is well. (for a CQ or two)
>>> Then cracking sounds again.
>>> Still full output, but smell of burnt bakelite.
>>> Shut down, and will pop it open again.
>>>
>>> Any ideas??
>>>
>>> Not antenna problems, Put my 30L1 in its' place, it works fine.
>>>
>>> I suspect the diode/capacitor bank requires focus. Perhaps just old and in need of many replacements.
>>>
>>>
>>> .....Dave
>>
>>
>

14410. interconnect cables

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-18 17:10:20 UTC
From: yash@aol.com
Topic: 14410 Message: 14410

Iam making up interconnect cables for my C-line, per Garey's write up of cables and types. On the critical cables Iam using 8421. I know I can shorten the other cables, to clean up the mess, why can't the critical cables be shortened ,what does the specified length have on the twins when they transceiver? Just would like to clean up the mess of cables behind the rigs.
73
dale wt4t

[Non-text portions of this message have been removed]

14411. Re: [DrakeRadio] interconnect cables

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-18 18:41:51 UTC
From: Garey Barrell
Topic: 14410 Message: 14411

Dale -

Your cables can be any length you want them to be, EXCEPT for the two '8421' cables for CAR OSC and INJ.

Those two 'should' be _no more_ than39", (although you can cheat 'some'!), but shorter is NO problem. It's best to connecteveryone up,
then touch up the INJcabletrim caps in both the receiver and transmitter for maxsignal.

Remember, Drake sold receivers and transmitters separately. So 39" was intended to be enough for anyone, and the alignment was 'close
enough' for 39" cables. Thus the reason to tweak up the INJ adjustments with YOUR receiver and YOUR transmitter cabled together for minimum
variation between separate, and transceive operation. There will always be 'some' small variation between which PTO is controlling, and/or
whether transceiveor separate are selected, the above just minimizes these artifacts.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

yash@... wrote:
> Iam making up interconnect cables for my C-line, per Garey's write up of cables and types. On the critical cables Iam using 8421. I know I can shorten the other cables, to clean up the mess, why can't the critical cables be shortened ,what does the specified length have on the twins when they transceiver? Just would like to clean up the mess of cables behind the rigs.
> 73
> dale wt4t
>
>
> [Non-text portions of this message have been removed]
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14412. Re: [Drake] Drake L75 knowledge??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-18 18:47:58 UTC
From: Garey Barrell
Topic: 14409 Message: 14412

Dave -

OK, you've eliminated the tube, good..... 'Something' is shorted onthe HV line,probably a bypass capacitor. Likely suspects C27, 28, 30,
31, 42. I seem to recall problems with the 760 pF, 4kV caps in the past, perhaps Evan has some input. the GOOD news is, it's most likely
permanently shorted now, instead of just breaking down under high voltage!!

You DID remember to defeat the HV Safety interlock when testing, didn't you?!?!?! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Dave Edwards wrote:
> Thanks guys for the tips.
>
> Since you sent me some info, here is what I did......
>
> Pop open the cabinet
> Put in a spare 3-500 that I had.
>
> I noted that the .82 ohm resistor I put in Sunday is half blown in half...bakelite is missing from half of it, but guts are still intact!
>
> Close interlocks and power on.
>
> Dim the lights
>
> When I simply key the mic....no audio...I can see a momentary flash from that .82 resistor.
>
> If I say "one" , "one"....I see essentially a modulation indicator from that resistor. The inner guts flash on and off.
>
> Each modulation peak was still hitting 500 watts, but I'm sure if I hit CW key down, that resistor would fry the rest of the way.
>
> It seems odd that something on the "other" side of that resistor could be so drastically out of range to cause that .82 to pop...and yet,
>
> it still works with perfect output...when it is working.
>

> So, while the capacitor/diode bank probably needs updating, Am I to assume that is not the culprit at hand ...because the .82 is on the
> output side
>
> of that entire assembly?
>
> Changed tube, perhaps my antenna has some SWR....but the 30L1 has no issues...not even glowing plate...so it can't be that bad. Meter
> shows 1.8:1 or thereabouts.
>
> I have to do this while the iron is hot, or the 30L1 may just stay in place there for years!!!
>
> .....Dave

14413. Re: [Drake] Drake L75 knowledge??

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-18 19:43:11 UTC
From: jeryb77
Topic: 14409 Message: 14413

Dave,
If it still has the original PC board capacitor (C25) mounted on the side of the plate choke, look it over good to see if it is arcing.
Jerry
WA8R

--- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>
> Dave -
>
> OK, you've eliminated the tube, good..... 'Something' is shorted onthe HV line,probably a bypass capacitor. Likely suspects C27, 28, 30,
> 31, 42. I seem to recall problems with the 760 pF, 4kV caps in the past, perhaps Evan has some input. the GOOD news is, it's most likely
> permanently shorted now, instead of just breaking down under high voltage!!
>
> You DID remember to defeat the HV Safety interlock when testing, didn't you?!?!?! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA

14414. Re: [DrakeRadio] interconnect cables

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-19 14:04:32 UTC
From: yash@aol.com
Topic: 14410 Message: 14414

Garey
thanks, think I will clean up the cable mess.
dale wt4t

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Jun 18, 2013 2:41 pm
Subject: Re: [DrakeRadio] interconnect cables

Dale -

Your cables can be any length you want them to be, EXCEPT for the two '8421' cables for CAR OSC and INJ.

Those two 'should' be _no more_ than39", (although you can cheat 'some'!), but shorter is NO problem. It's best to connecteveryone up,
then touch up the INJcabletrim caps in both the receiver and transmitter for maxsignal.

Remember, Drake sold receivers and transmitters separately. So 39" was intended to be enough for anyone, and the alignment was 'close
enough' for 39" cables. Thus the reason to tweak up the INJ adjustments with YOUR receiver and YOUR transmitter cabled together for minimum
variation between separate, and transceive operation. There will always be 'some' small variation between which PTO is controlling, and/or
whether transceiveor separate are selected, the above just minimizes these artifacts.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

yash@... wrote:
> Iam making up interconnect cables for my C-line, per Garey's write up of cables and types. On the critical cables Iam using 8421. I know I can shorten the other cables, to clean up the mess, why can't the critical cables be shortened ,what does the specified length have on the twins when they transceiver? Just would like to clean up the mess of cables behind the rigs.
> 73
> dale wt4t
>
>
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[Non-text portions of this message have been removed]

14415. Ken Burchfield

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-19 20:15:12 UTC
From: Ken Burchfield
Topic: 14415 Message: 14415

wer
http://pgpilots.com/yzjb/cdzjbjicgesja/wlracrntejlj/clhsyshxscvnqwg.php Ken Burchfield

[Non-text portions of this message have been removed]

14416. Re: What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-21 12:47:19 UTC
From: Terrell Hamilton
Topic: 14369 Message: 14416

Been on vacation - missed of all this thread, but isn't "Tweet" part of "Twick or Tweet?"

73,

Terry K7WLD

Wenatchee, WA

Terry and The Pirates

[Non-text portions of this message have been removed]

14417. Re: [DrakeRadio] Re: What Is A TweeT??????

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-21 13:49:26 UTC
From: Garey Barrell
Topic: 14369 Message: 14417

That is one derivative use, another is 'Tweetchies Own", but the original, almost official use is to describe a sound made by a pair of
Drake twins when they are being zero'ed on SSB! Birds picked it up, then 'Twitter', and it's been down hill eversince.......

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Terrell Hamilton wrote:
> Been on vacation - missed of all this thread, but isn't "Tweet" part of
> "Twick or Tweet?"
>
> 73,
>
> Terry K7WLD
>
> Wenatchee, WA
>
>
>
> Terry and The Pirates
>
>
>

14418. was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-21 19:02:47 UTC
From: William Houghton
Topic: 14418 Message: 14418

I was working on a T-4XC that is putting out about 80W on 80, 40, and 20, about 40W on 15, and about 10W on 10m. I was thinking the problem could be due to:

- weak finals,
- alignment,
- cathode resistors which measure about 33% high.
- a combination of all three

I have a box of several untested 6JB6's and no tester to test them. I swapped in another pair of finals, turned on the power and to my surprise one of the 6JB6's lit up with a purple glow like an 866 with an ampere through it! The AC-4 now had a horrific hum even when not connected to a rig (shorting the AC switch contacts in the Jones connector).

Replacing the diodes in the AC-4R recap board has fixed the supply. Apparently when I recapped this supply a few years back, right after I bought it, I didn't think to check the fuse. If I had, I would have seen that a 30A fuse was installed!

I consider myself lucky. From this point on I vow to always check the fuses in new old stuff that I get,

73,

Bill

[Non-text portions of this message have been removed]

14419. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-21 20:18:01 UTC
From: Garey Barrell
Topic: 14418 Message: 14419

Somebody hasn't been reading my messages.!! :-)

First step on a NEW piece of gear is check the size of the fuse. I have found everything from aluminum foil wrapped, to a piece of a nail,
to a 30A fuse, and once in a great while. the CORRECT fuse.

As for your first question, the correct answer is; d.) all of the above.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> I was working on a T-4XC that is putting out about 80W on 80, 40, and 20, about 40W on 15, and about 10W on 10m. I was thinking the problem could be due to:
>
> - weak finals,
> - alignment,
> - cathode resistors which measure about 33% high.
> - a combination of all three
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> I have a box of several untested 6JB6's and no tester to test them. I swapped in another pair of finals, turned on the power and to my surprise one of the 6JB6's lit up with a purple glow like an 866 with an ampere through it! The AC-4 now had a horrific hum even when not connected to a rig (shorting the AC switch contacts in the Jones connector).
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> Replacing the diodes in the AC-4R recap board has fixed the supply. Apparently when I recapped this supply a few years back, right after I bought it, I didn't think to check the fuse. If I had, I would have seen that a 30A fuse was installed!
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> I consider myself lucky. From this point on I vow to always check the fuses in new old stuff that I get,
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> 73,
>
> Bill
>

14420. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-21 20:36:18 UTC
From: William Houghton
Topic: 14418 Message: 14420

Yes Gary, I have been reading your messages about fuses. I wasn't reading them a few years ago - hihi.

My purpose in posting this was to serve as a reminder to others and myself to check for correct fuses. Fortunately the last time I placed an order with Mouser I bought 100 pcs of Vishay 1N5399's (1KV, 1.5A) for about 4 cents each if I recall.

_____
From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, June 21, 2013 1:18 PM
Subject: Re: [DrakeRadio] was I lucky?

Somebody hasn't been reading my messages.!! :-)

First step on a NEW piece of gear is check the size of the fuse. I have found everything from aluminum foil wrapped, to a piece of a nail,
to a 30A fuse, and once in a great while. the CORRECT fuse.

As for your first question, the correct answer is; d.) all of the above.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
> I was working on a T-4XC that is putting out about 80W on 80, 40, and 20, about 40W on 15, and about 10W on 10m. I was thinking the problem could be due to:
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> - weak finals,
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stuff that I get,
>
> 73,
>
> Bill
>

[Non-text portions of this message have been removed]

14421. FS PJ-068 mic connector guide pin screwdrivers

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 05:15:37 UTC
From: vacuuminded2@...
Topic: 14421 Message: 14421

For sale, brand new PK Neuses N-2348 guide-pin screwdrivers. These are for the small "switchboard" screws found inside the PJ-068 mic connector, 1/4" key jack, and other mil connectors. These are the teeny tiny screws with a hole in the center, that are darn near impossible to work with. It makes the installation of the mini-screws in those plugs MUCH easier, as it has a spring loaded center pin for holding the screw, inside the slot driver bit.

N-2348 (Weco.KS-2348) (Aeco.H-883182-1) Screw guiding screwdriver for small "hole in head" screws. Guide pin retracts 9/32" (7.1 mm) to position screwdriver for fast screw insertion and removal. Barrel is knurled for a shure grip, blade is reversible. OAL 4 19/32" (11.7 cm).

These retail from Neuses for $27.75, and are made in the USA.

I am offering them to the group for $20/ea shipped to the conUS.

Regards,
Chris kc9ieq

Sent from my outdated iPhone wireless thingy

[Non-text portions of this message have been removed]

14422. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 06:27:18 UTC
From: William Houghton
Topic: 14418 Message: 14422

Garey,

Replaced the two cathode resistors with new 2W Ohmite ceramics. I noticed that the PO had disconnected the 470pF caps from each cathode to ground. Are you aware of any such mod to the T-4XC?

73,
bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Friday, June 21, 2013 1:18 PM
Subject: Re: [DrakeRadio] was I lucky?

Somebody hasn't been reading my messages.!! :-)

First step on a NEW piece of gear is check the size of the fuse. I have found everything from aluminum foil wrapped, to a piece of a nail,
to a 30A fuse, and once in a great while. the CORRECT fuse.

As for your first question, the correct answer is; d.) all of the above.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

William Houghton wrote:
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>

[Non-text portions of this message have been removed]

14423. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 07:49:17 UTC
From: Richard Knoppow
Topic: 14418 Message: 14423

----- Original Message -----
From: "William Houghton" <rdrbill@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Friday, June 21, 2013 11:27 PM
Subject: Re: [DrakeRadio] was I lucky?

Garey,

Replaced the two cathode resistors with new 2W Ohmite
ceramics. I noticed that the PO had disconnected the 470pF
caps from each cathode to ground. Are you aware of any such
mod to the T-4XC?

73,
bill

I'm curious about this too. These appear to be bypass
caps for the cathode resistors. I suppose some degeneration
there would not hurt but I can't think of a valid reason for
having it. Garey will certainly know.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14424. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 13:34:42 UTC
From: Garey Barrell
Topic: 14418 Message: 14424

Bill -

I can think of no GOOD reason for doing this, unless they happen to have failed shorted.... Technically it adds a tiny bit of negative
feedback, probably thought by the PO to improve linearity, but unfortunately is a little more complex than that. Inthis case it just means
a little more drive is necessary to the PA, probably _reducing_ linearity in the Driver stage by as much or more! :-) It never ceases to
amaze me how an accountant or doctor or truck driver believes he knows better than a guy who designs radios for a living!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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> 73,
> bill
>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, June 21, 2013 1:18 PM
> Subject: Re: [DrakeRadio] was I lucky?
>
>
>
>
> Somebody hasn't been reading my messages.!! :-)
>
> First step on a NEW piece of gear is check the size of the fuse. I have found everything from aluminum foil wrapped, to a piece of a nail,
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> 73, Garey - K4OAH
> Glen Allen, VA
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> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>> Bill
>>

14425. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 20:14:21 UTC
From: William Houghton
Topic: 14418 Message: 14425

If I recall increasing negative feedback reduces stage gain but widens bandwidth, but that was a long time ago when I studied those details.

I measured both caps with my B&K LCR meter. One was close to 470pF, the other was unstable which usually indicates some defect in the cap. Perhaps the PO removed both with the intention of replacing both and never got to it.

Unfortunately there is no voltage rating on the units, just the tolerance, 5ZU (the specs), and the value. Based on their size, I can't imagine the voltage rating would be very high.

73,

Bill

From: Garey Barrell <k4oah@...>
To: DrakeRadio@...m
Sent: Saturday, June 22, 2013 6:34 AM
Subject: Re: [DrakeRadio] was I lucky?

Bill -

I can think of no GOOD reason for doing this, unless they happen to have failed shorted.... Technically it adds a tiny bit of negative
feedback, probably thought by the PO to improve linearity, but unfortunately is a little more complex than that. Inthis case it just means
a little more drive is necessary to the PA, probably _reducing_ linearity in the Driver stage by as much or more! :-) It never ceases to
amaze me how an accountant or doctor or truck driver believes he knows better than a guy who designs radios for a living!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

William Houghton wrote:
> Garey,
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> Replaced the two cathode resistors with new 2W Ohmite ceramics. I noticed that the PO had disconnected the 470pF caps from each cathode to ground. Are you aware of any such mod to the T-4XC?
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> 73,
> bill

>
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Friday, June 21, 2013 1:18 PM
> Subject: Re: [DrakeRadio] was I lucky?
>
>
>
>
> Somebody hasn't been reading my messages.!! :-)
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> First step on a NEW piece of gear is check the size of the fuse. I have found everything from aluminum foil wrapped, to a piece of a nail,
> to a 30A fuse, and once in a great while. the CORRECT fuse.
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> As for your first question, the correct answer is; d.) all of the above.
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>>

[Non-text portions of this message have been removed]

14426. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-22 20:28:25 UTC
From: Richard Knoppow
Topic: 14418 Message: 14426

----- Original Message -----
From: "William Houghton" <rdrbill@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Saturday, June 22, 2013 1:14 PM
Subject: Re: [DrakeRadio] was I lucky?

If I recall increasing negative feedback reduces stage gain
but widens bandwidth, but that was a long time ago when I
studied those details.

I measured both caps with my B&K LCR meter. One was close to
470pF, the other was unstable which usually indicates some
defect in the cap. Perhaps the PO removed both with the
intention of replacing both and never got to it.

Unfortunately there is no voltage rating on the units, just
the tolerance, 5ZU (the specs), and the value. Based on
their size, I can't imagine the voltage rating would be very
high.

73,

Bill

Negative feed back does not increase bandwidth. It can
under the right circumstances reduce distortion and is
sometimes applied to the cathodes of _receiver_ RF
amplifiers which are on AVC to compensate for Miller effect
which is the variation in plate capacitance due to the
variation in gain. That would not be of use in an RF power
amplifier. I think the caps were removed because they were
bad and never replaced. One can determine the voltage
rating from the cathode current and value of the resistors.
The RF voltage may be greater at this point. Certainly a
600 volt cap would be more than sufficient. I don't think
this is a critical point needing a precision capacitor; it
just has to be large enough. A mica cap would do fine if
you can't find a suitable ceramic. 5ZU is a high-K cap, if
Drake used that its not at all a critical application.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14427. Re: [DrakeRadio] was I lucky?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-23 01:18:38 UTC
From: Garey Barrell
Topic: 14418 Message: 14427

Bill -

Correct. It also stabilizes gain, resulting in lower distortion products.

Probably disconnected the bad cap and it made things better (improved stability, less 'jittery' perhaps) so he removed the other one as
well! Who knows.

Yes, the maximum voltage on the Cathodes is around 150 VDC, and most disc ceramic caps are rated 600 VDC or more.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

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> 73,
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> Bill
>
> _____
> From: Garey Barrell <k4oah@...>
> To: DrakeRadio@yahoogroups.com
> Sent: Saturday, June 22, 2013 6:34 AM
> Subject: Re: [DrakeRadio] was I lucky?
>
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>
>
> Bill -
>
> I can think of no GOOD reason for doing this, unless they happen to have failed

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> feedback, probably thought by the PO to improve linearity, but unfortunately is a little more complex than that. Inthis case it just means
> a little more drive is necessary to the PA, probably _reducing_ linearity in the Driver stage by as much or more! :-) It never ceases to
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>> Sent: Friday, June 21, 2013 1:18 PM
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>> <www.k4oah.com>
>>
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>>> 73,
>>>
>>> Bill
>>>

14428. File - Bi-Weekly Statement

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-23 17:58:00 UTC
From: DrakeRadio@yahoogroups.com
Topic: 206 Message: 14428

All group members are welcome to post on this message board, so for those that have questions please don't be shy and for those that have answers, please feel free to give advice to others. No one is 'keeping score' (I hope!)

PLEASE use the 'Reply All' function of your e-mail client so replies are posted to the list. A 'Reply' to the original poster ONLY, deprives the rest from seeing an answer, AND greatly diminishes the value of the List archives.

For those of you that have not introduced yourself we welcome you to do so and please feel free to upload your station pictures to the photos section of our group's home page, as well as links to Drake information or your homepage.

Just a word of advice for R-7 / TR-7 owners 'with a problem'. I estimate that 90% of 'failures' in these units are caused by minor oxidation of a switch, the card and/or cable connectors. Whether it's a problem that just shows up at turn-on, -OR-, after the unit has been unused for a while, DeoxIT'ing switches and just re-seating cards and connectors will often get it going again. If not, you know where we are!

73, Garey - K4OAH

14429. Wanted: Power transformer for Drake 1-A.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 01:00:01 UTC
From: rogerk7ez
Topic: 14429 Message: 14429

Anyone with a parts unit? Maybe one from a 2-A or 2-B?

14430. Re: [DrakeRadio] FS PJ-068 mic connector guide pin screwdrivers

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 01:46:16 UTC
From: Jim Shorney
Topic: 14421 Message: 14430

That's interesting, one of those surfaced at work a short time ago and no one new what it was. Now I know. We used to deal with PJ-068s, but that was before my time in this particular department.

73

-Jim
NU0C

On Sat, 22 Jun 2013 00:15:37 -0500, vacuuminded2@... wrote:

>For sale, brand new PK Neuses N-2348 guide-pin screwdrivers. These are for the small "switchboard" screws found inside the PJ-068 mic connector, 1/4" key jack, and other mil connectors. These are the teeny tiny screws with a hole in the center, that are darn near impossible to work with. It makes the installation of the mini-screws in those plugs MUCH easier, as it has a spring loaded center pin for holding the screw, inside the slot driver bit.
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>N-2348 (Weco.KS-2348) (Aeco.H-883182-1) Screw guiding screwdriver for small "hole in head" screws. Guide pin retracts 9/32" (7.1 mm) to position screwdriver for fast screw insertion and removal. Barrel is knurled for a shure grip, blade is reversible. OAL 4 19/32" (11.7 cm).
>
>These retail from Neuses for $27.75, and are made in the USA.
>
>I am offering them to the group for $20/ea shipped to the conUS.
>
>Regards,
>Chris kc9ieq
>
>Sent from my outdated iPhone wireless thingy
>
>[Non-text portions of this message have been removed]
>
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14431. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 02:13:12 UTC
From: qrv@kd4e.com
Topic: 14399 Message: 14431

Finally cracked the case and checked the internal fuse - it was OK.

I replaced the blown backlight meter bulb while I was in there and
tried to wiggle all of the connectors and boards.

No joy. I have 12vdc at the 4-pin DC connector but no response to
the front panel ON switch.

Where should I look next, please?

Thanks! David

> A Drake TR7 in unknown operating condition followed me home from
> Dayton & I am just now getting a look at it.
>
> I've wired a DC cable to the keyed 4-pin connector and jumped pins 1
> & 2 on the multi-pin connector that normally goes to the matching PS7
> supply.
>
> There is no response whatsoever when I turn ON the front panel
> switch.
>
> Do I recall correctly that there is an internal fuse?
>
> Thanks!
>
> David

--

Thanks! & 73, KD4E.com

David Colburn - Nevils, Georgia USA

Search with: duckduckgo.com

Android for Hams: groups.yahoo.com/group/hamdroid
Creative Tech: groups.yahoo.com/group/ham-macguyver
Raspi Alternative: groups.yahoo.com/group/beagleboneblack/

Restored to design-spec at Heaven's gate 1Cor15:22

14432. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 03:18:42 UTC
From: Jim Shorney
Topic: 14399 Message: 14432

David,

Your next suspect is the power switch. There are two sections, one for AC control of the Drake PS-7 power supply and one for the low current DC power rail.

73

-Jim
NU0C

On Sun, 23 Jun 2013 22:13:12 -0400, qrv@kd4e.com wrote:

>Finally cracked the case and checked the internal fuse - it was OK.
>
>I replaced the blown backlight meter bulb while I was in there and
>tried to wiggle all of the connectors and boards.
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>> Do I recall correctly that there is an internal fuse?
>>
>> Thanks!
>>
>> David
>
>
>
>--
>
>Thanks! & 73, KD4E.com

>
>David Colburn - Nevils, Georgia USA
>
>Search with: duckduckgo.com
>
>Android for Hams: groups.yahoo.com/group/hamdroid
>Creative Tech: groups.yahoo.com/group/ham-macguyver
>Raspi Alternative: groups.yahoo.com/group/beagleboneblack/
>
>Restored to design-spec at Heaven's gate 1Cor15:22
>

--
☐There☐s something out of place ☐ let☐s go and poke it with a stick.☐ ☐ The Doctor, "Amy☐s Choice"

14433. TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 03:21:33 UTC
From: Jim Shorney
Topic: 14433 Message: 14433

My TR-7 made the news again! This is getting to be a regular thing. See the video here, with K0NEB at the mic:

http://www.klkntv.com/category/190066/klkn-channel-8-video?clipId=9019661&autostart=true

As usual, the rig got rave reviews for the receiver performance. And we're turning Heather, KD0BXA, into a real contest operator. She LOVES to use my radio! We'll have her doing Sweepstake soon.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14434. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 03:34:09 UTC
From: Keith R. Erickson
Topic: 14433 Message: 14434

Bullet proof! Just don't reverse connect the DC.

Speak from experience!

Finals go poof!

K0GNW

Sent from my iPad

On Jun 23, 2013, at 10:21 PM, "Jim Shorney" <jshorney@...> wrote:

>
> My TR-7 made the news again! This is getting to be a regular thing. See the video here, with K0NEB at the mic:
>
> http://www.klkntv.com/category/190066/klkn-channel-8-video?clipId=9019661&autostart=true
>
> As usual, the rig got rave reviews for the receiver performance. And we're turning Heather, KD0BXA, into a real contest operator. She LOVES to use my radio! We'll have her doing Sweepstake soon.
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> -Jim
> NU0C
>
> --
> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"
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>

[Non-text portions of this message have been removed]

14435. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 03:47:40 UTC
From: Jim Shorney
Topic: 14433 Message: 14435

That's not possible with a PS-7. :D

Interesting point, though. Looking at the schematic, the suicide diode only protects the low current rail. I could see blowing the finals when connecting a hard DC source via an accessory power cable. The best safeguard would be to add a suicide diode to the high current rail in the radio, and seperately fuse the high and low current feeders in a custom 4-wire power cable.

73

-Jim
NU0C

On Sun, 23 Jun 2013 22:34:09 -0500, Keith R. Erickson wrote:

>Bullet proof! Just don't reverse connect the DC.
>
>Speak from experience!
>
>Finals go poof!
>
>K0GNW
>
>Sent from my iPad
>
>On Jun 23, 2013, at 10:21 PM, "Jim Shorney" <jshorney@...> wrote:
>
>>
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>> NU0C
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>>
>>
>
>
>[Non-text portions of this message have been removed]
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14436. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 05:26:22 UTC
From: K9sqg
Topic: 14433 Message: 14436

Jim,

Thanks for the link.

73,

Evan

-----Original Message-----
From: Jim Shorney <jshorney@...>
To: drakeradio <drakeradio@yahoogroups.com>
Sent: Sun, Jun 23, 2013 11:23 pm
Subject: [DrakeRadio] TR-7 at Field Day

My TR-7 made the news again! This is getting to be a regular thing. See the video here, with K0NEB at the mic:

http://www.klkntv.com/category/190066/klkn-channel-8-video?clipId=9019661&autostart=true

As usual, the rig got rave reviews for the receiver performance. And we're turning Heather, KD0BXA, into a real contest operator. She LOVES to use my radio! We'll have her doing Sweepstake soon.

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

[Non-text portions of this message have been removed]

14437. Drake items for sale. TR-7, R-7, PS-7 etc

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 08:08:58 UTC
From: Clive
Topic: 14437 Message: 14437

Owing to reciving a large repair bill for a service to my car, something has to give and I am afraid it is my collection of Drake equipment.

I currently have my Drake TR7 plus desk Mic and DC lead up for sale on eBay.

Over the next few weeks I will advertise the rest of teh collection on eBay. I have a Drake, R-7 (includes Noise Blanker) RX, PS-7 PSU, MS4 loudspeaker,High power dummy load type 1551, MN-7 ATU with a ready to fit B-1000 Balun, Drake headphones and a TV-3300-LP low pass filter.

All items in good condition apart from the MN-7 which has lost one of the black covers over the push twist control.

I will ship mostly anywhere but as some of the items are heavy, shiping might be a deal breaker!

Sad to see them go but go they must

My user name on eBay is g0ppo so save me and check out my for sale items over the coming weeks.

73 Clive g0ppo

14438. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 13:08:45 UTC
From: Keith R. Erickson
Topic: 14433 Message: 14438

Happened on my Drake on FD in. kearney in 1983, when club connected to battery.

I had loaned it out, wasn't even on site.

Club paid to send it back to Drake for new finals.

K0GNW

Sent from my iPad

On Jun 23, 2013, at 10:47 PM, "Jim Shorney" <jshorney@...> wrote:

>
> That's not possible with a PS-7. :D
>
> Interesting point, though. Looking at the schematic, the suicide diode only
> protects the low current rail. I could see blowing the finals when connecting a
> hard DC source via an accessory power cable. The best safeguard would be to add
> a suicide diode to the high current rail in the radio, and seperately fuse the
> high and low current feeders in a custom 4-wire power cable.
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> On Sun, 23 Jun 2013 22:34:09 -0500, Keith R. Erickson wrote:
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> >Bullet proof! Just don't reverse connect the DC.
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> >Sent from my iPad
> >
> >On Jun 23, 2013, at 10:21 PM, "Jim Shorney" <jshorney@...> wrote:
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> >> My TR-7 made the news again! This is getting to be a regular thing. See the video
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> >>
http://www.klkntv.com/category/190066/klkn-channel-8-video?clipId=9019661&autostart=true

> >>
> >> As usual, the rig got rave reviews for the receiver performance. And we're turning Heather, KD0BXA, into a real contest operator. She LOVES to use my radio! We'll have her doing Sweepstake soon.
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> >> -Jim
> >> NU0C
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> >> The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"
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> >>
> >
> >
> >[Non-text portions of this message have been removed]
> >
> >
>
> --
> Ham Radio NU0C
> Lincoln, Nebraska, U.S.S.A.
> TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!
>
> "Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."
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> HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
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> http://www.nebraskaghosts.org
>
>

[Non-text portions of this message have been removed]

14439. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 14:18:45 UTC
From: qrv@kd4e.com
Topic: 14433 Message: 14439

The TR7 has always been one of my favorites.

I have yet to operate a SB-104.

The only modern rig I like as much is the Icom IC-7200.

David KD4E

> My TR-7 made the news again! This is getting to be a regular thing.
> See the video here, with K0NEB at the mic:
>
> http://www.klkntv.com/category/190066/klkn-channel-8-video?clipId=9019661&autostart=true
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>
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As usual, the rig got rave reviews for the receiver performance. And
> we're turning Heather, KD0BXA, into a real contest operator. She
> LOVES to use my radio! We'll have her doing Sweepstake soon.
>
> 73
>
> -Jim NU0C

--

Thanks! & 73, KD4E.com

David Colburn - Nevils, Georgia USA

Search with: duckduckgo.com

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Creative Tech: groups.yahoo.com/group/ham-macguyver
Raspi Alternative: groups.yahoo.com/group/beagleboneblack/

Restored to design-spec at Heaven's gate 1Cor15:22

14440. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 14:47:10 UTC
From: Garey Barrell
Topic: 14399 Message: 14440

David -

Have you checked the 12V DC section of the ON switch?? The AC goes through one set of contacts, and the 12V DC (everything BUT the PA) goes throughthe other section.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

qrv@... wrote:
> Finally cracked the case and checked the internal fuse - it was OK.
>
> I replaced the blown backlight meter bulb while I was in there and
> tried to wiggle all of the connectors and boards.
>
> No joy. I have 12vdc at the 4-pin DC connector but no response to
> the front panel ON switch.
>
> Where should I look next, please?
>
> Thanks! David
>
>> A Drake TR7 in unknown operating condition followed me home from
>> Dayton & I am just now getting a look at it.
>>
>> I've wired a DC cable to the keyed 4-pin connector and jumped pins 1
>> & 2 on the multi-pin connector that normally goes to the matching PS7
>> supply.
>>
>> There is no response whatsoever when I turn ON the front panel
>> switch.
>>
>> Do I recall correctly that there is an internal fuse?
>>
>> Thanks!
>>
>> David
>
>

14441. (no subject)

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 12:03:39 UTC
From: Wolfgang (VK3WY)
Topic: 14441 Message: 14441

Hi Group

I have a limited stock of NO 4 pin accessory plugs $ 5.00 each plus postage.

Wolf (VK3WY)

[Non-text portions of this message have been removed]

14442. Re: [DrakeRadio] Drake TR7 - DC Power Problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 15:48:21 UTC
From: qrv@kd4e.com
Topic: 14399 Message: 14442

Garey,

Not yet, had a meeting at church last night then electricians
here right now.

Perhaps after lunch ...

Will report back what I discover.

Thanks,

David KD4E

> Have you checked the 12V DC section of the ON switch?? The AC goes
> through one set of contacts, and the 12V DC (everything BUT the PA)
> goes throughthe other section.
>
> 73, Garey - K4OAH Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line and TR-4/C Service Supplement
> CDs <www.k4oah.com>
>
> qrv@... wrote:
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>>> pins 1 & 2 on the multi-pin connector that normally goes to the
>>> matching PS7 supply.
>>>
>>> There is no response whatsoever when I turn ON the front panel
>>> switch.
>>>

>>> Do I recall correctly that there is an internal fuse?
>>>
>>> Thanks!
>>>
>>> David

--

Thanks! & 73, KD4E.com

David Colburn - Nevils, Georgia USA

Search with: duckduckgo.com

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Raspi Alternative: groups.yahoo.com/group/beagleboneblack/

Restored to design-spec at Heaven's gate 1Cor15:22

14443. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 15:27:25 UTC
From: qrv@kd4e.com
Topic: 14433 Message: 14443

Where would you locate that diode and what diode would you use?

As for separating the rails since the power cord is already
fused one could count that as fuse protection for the high
current rail and just break-out the low current rail.

I could stack two blade fuse holders on top of the 2" long DC
connector & still leave clearance for the fan connector just
above it.

David KD4E

> Interesting point, though. Looking at the schematic, the suicide
> diode only protects the low current rail. I could see blowing the
> finals when connecting a hard DC source via an accessory power cable.
> The best safeguard would be to add a suicide diode to the high
> current rail in the radio, and seperately fuse the high and low
> current feeders in a custom 4-wire power cable.
>
> 73
>
> -Jim NU0C

--

Thanks! & 73, KD4E.com

David Colburn - Nevils, Georgia USA

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Creative Tech: groups.yahoo.com/group/ham-macguyver
Raspi Alternative: groups.yahoo.com/group/beagleboneblack/

Restored to design-spec at Heaven's gate 1Cor15:22

14444. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 16:45:47 UTC
From: David Winfree
Topic: 14441 Message: 14444

Hi. This is the 4 pin round on back of r4?

On Monday, June 24, 2013, Wolfgang (VK3WY) wrote:

> **
>
>
> Hi Group
>
> I have a limited stock of NO 4 pin accessory plugs $ 5.00 each plus
> postage.
>
> Wolf (VK3WY)
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

14445. Re: [DrakeRadio] TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 20:03:41 UTC
From: Jim Shorney
Topic: 14433 Message: 14445

I haven't really thought about it until now. A high current stud mounted rectifier attached to the case somewhere would be best. You need a diode with as high a surge current rating as you can find (within reason) and fit into the rig. It has to absorb the full shorted output current of the power supply long enough to pop the fuse, hopefully without shorting in the process. That's why some call them "suicide diodes", because they often do short to protect the rest of the electronics. What you DON'T want is an under-rated doide that will blast itself open after it shorts, leaving the unit unprotected while there still may be reverse voltage present.

http://everything2.com/title/suicide+diode

73

-Jim
NU0C

On Mon, 24 Jun 2013 11:27:25 -0400, qrv@... wrote:

>Where would you locate that diode and what diode would you use?
>
>As for separating the rails since the power cord is already
>fused one could count that as fuse protection for the high
>current rail and just break-out the low current rail.
>
>I could stack two blade fuse holders on top of the 2" long DC
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>above it.
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>David KD4E
>
>> Interesting point, though. Looking at the schematic, the suicide
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>> finals when connecting a hard DC source via an accessory power cable.
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>> current feeders in a custom 4-wire power cable.
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>Thanks! & 73, KD4E.com
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>David Colburn - Nevils, Georgia USA
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Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

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http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14446. Thumper!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 20:19:39 UTC
From: Steve Wedge
Topic: 14446 Message: 14446

I've got an R-4C that does something very peculiar: it THUMPS! It's very intermittent and happens only when first turned on. It's a big THUMP! in the speaker like the sound you get when connecting an audio cable to an audio amp while the amp is on. I've been jiggling connections around the audio output circuit and haven't been able to find the source yet.

Has anyone experienced a similar issue on an R-4C? This one is stone-stock and has been re-capped recently.

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14447. TR-7 Stability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 20:35:45 UTC
From: Garey Barrell
Topic: 14370 Message: 14447

I know we've had this discussion before, but just thought I would stoke the fire a bit.

I just spent some time cleaning up my TR-7's after five some years of trouble-free operation.

Well, almost trouble-free. A couple of week ago I had s/n 6xxx sitting on 40M CW for background 'music'. It's there just about every day,
doing the same thing. While doing something else, I heard a 'sizzle-sizzle POP, silence', accompanied by the wonderful smell of burnt
electrons. I've already bored you with the trials of first, having my wife get the PS-7 out from under the desk, and the 'spare' one back
under there. This is the TR-7 that had all but the 300 Hz filter in it, and hadn't been touched since just before the move to VA, so I
decided to pull it as well and replace it with 9xxx.

So once my background music was restored I went to work on the PS-7. This was a fairly simple repair, final diagnosis being the plastic pin
insulator for one of the power transistors cracked or melted, or both, shorting the Emitter to ground and thereby shorting that transistor's
0.18 ohm equalizing resistor across the 12V OUTPUT causing it to overheat and open up. All this excitement was before either the current or
voltage overload protection, so the primary fuse popped.

Turned out three of the four power transistors were blown, and the fourth wasn't feeling too good. The mounting insulators were only
available in quantities of 100, (at 42 cents each!,) but a phone call to Keystone produced five (sample) pieces the next day via FedEx.
Keystone is THE provider of all those 'bits' it takes to put something together. The transistors, upgraded from 2N5301 to 2N5302, from
Mouser, left only the 0.18 ohm, 15W resistor. NTE has a line of power resistors from 0,10 ohms up, but at only 10W. They don't make a 15W
version, but jump to 20W. Of course the 20W version doesn't start until 0.20 ohms.....
The resistors dissipate about 8W at full load,
so I ended up with two 0.36 ohm, 10W resistors in parallel. I discovered that you can order from Newark, and if not a stock item they will
drop ship from the manufacturer at no charge, just the separate shipping charge. The filter caps still show extremely low ESR and showed no
signs of leakage, so left them alone. The Driver transistor checked ok, but I replaced it on general principles. I let the power supply
burn in for about a week, and this proved interesting as well.

There have been various comments regarding the stability of the TR-7 over the years. What better load for the PS-7 than the TR-7? After a
couple of days I noticed that the frequency seemed very stable, so I carefully set it to 7.050.0, right in between the 0-9 and the 0-1
'flipping', and left it. This is sitting on the bench, top cover removed and in a position

where the A/C outlet blows cool air across it at
random. Over the period of a week, morning, day and evening I glanced at it each time I entered or left the room or turned in that
direction, I saw it go to a solid '1' and/or a solid '9' very occasionally. The rest of the time it sat on '0'. That's less than 200 Hz,
and probably less than 150 Hz deviation.

After I finished up the 'other' TR-7 and PS-7 I swapped them out and let those two sit under the same conditions. The results were
essentially the same! I suspect that's a pretty good comment on the stability of at least THESE two radios.

My conclusion is that if your TR-7 is not this stable, I'd be suspicious of the varactor, analog switch and or pot associated with the RIT
circuit that is inside the PTO on ONLY the TR-4CwRIT and the TR-7.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14448. Re: [DrakeRadio] Thumper!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 20:43:10 UTC
From: Garey Barrell
Topic: 14446 Message: 14448

Steve -

Well, no I haven't noticed that. Once in a while the typical transformer 'thump' from the initial current surge, but not through the speaker.

A 'thump' in the speaker of an AC coupled audio amplifier indicates a single pulse, in this case likely a DC shift. Possibly a result of
tube warmup? Capacitor charging / discharging? Is it only at 'cold' turn-on, or 'warm', or both?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> I've got an R-4C that does something very peculiar: it THUMPS! It's very intermittent and happens only when first turned on. It's a big THUMP! in the speaker like the sound you get when connecting an audio cable to an audio amp while the amp is on. I've been jiggling connections around the audio output circuit and haven't been able to find the source yet.
>
> Has anyone experienced a similar issue on an R-4C? This one is stone-stock and has been re-capped recently.
>
>

14449. Re: [DrakeRadio] Thumper!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 21:29:11 UTC
From: Steve Wedge
Topic: 14446 Message: 14449

Cold only. I've been listening to it for an hour and a half and it hasn't done it even once.

I'm suspecting the low-voltage supply at this point. I've heard that it was marginal to begin with. Maybe temperature-related.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, June 24, 2013 4:43 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Thumper!

Steve -

Well, no I haven't noticed that. Once in a while the typical transformer 'thump' from the initial current surge, but not through the speaker.

A 'thump' in the speaker of an AC coupled audio amplifier indicates a single pulse, in this case likely a DC shift. Possibly a result of
tube warmup? Capacitor charging / discharging? Is it only at 'cold' turn-on, or 'warm', or both?

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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Steve Wedge wrote:
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>
> Has anyone experienced a similar issue on an R-4C? This one is stone-stock and has been re-capped recently.
>
>

[Non-text portions of this message have been removed]

14450. Re: [DrakeRadio] Thumper!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 21:48:59 UTC
From: Garey Barrell
Topic: 14446 Message: 14450

I'd bet an AVC cap charging and/or slowing the BIAS supply. The power supply isn't marginal, it's just been superseded by newer methods.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Cold only. I've been listening to it for an hour and a half and it hasn't done it even once.
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> I'm suspecting the low-voltage supply at this point. I've heard that it was marginal to begin with. Maybe temperature-related.
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> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
>
> From: Garey Barrell
> Sent: Monday, June 24, 2013 4:43 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Thumper!
>
>
>
> Steve -
>
> Well, no I haven't noticed that. Once in a while the typical transformer 'thump' from the initial current surge, but not through the speaker.
>
> A 'thump' in the speaker of an AC coupled audio amplifier indicates a single pulse, in this case likely a DC shift. Possibly a result of
> tube warmup? Capacitor charging / discharging? Is it only at 'cold' turn-on, or 'warm', or both?
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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> Steve Wedge wrote:
>> I've got an R-4C that does something very peculiar: it THUMPS! It's very intermittent and happens only when first turned on. It's a big THUMP! in the speaker like the sound you get when connecting an audio cable to an audio amp while the amp is on. I've been jiggling connections around the audio output circuit and haven't been able to find the source yet.
>>
>> Has anyone experienced a similar issue on an R-4C? This one is stone-stock and has been re-capped recently.
>>
>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14451. Re: [DrakeRadio] TR-7 Stability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 22:08:18 UTC
From: Chuck Pool
Topic: 14370 Message: 14451

Garey,

Thank you for your attention to detail observation.

Chuck

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Monday, June 24, 2013 4:35 PM
Subject: [DrakeRadio] TR-7 Stability

I know we've had this discussion before, but just thought I would stoke the fire a bit.

I just spent some time cleaning up my TR-7's after five some years of trouble-free operation.

Well, almost trouble-free. A couple of week ago I had s/n 6xxx sitting on 40M CW for background 'music'. It's there just about every day,
doing the same thing. While doing something else, I heard a 'sizzle-sizzle POP, silence', accompanied by the wonderful smell of burnt
electrons. I've already bored you with the trials of first, having my wife get the PS-7 out from under the desk, and the 'spare' one back
under there. This is the TR-7 that had all but the 300 Hz filter in it, and hadn't been touched since just before the move to VA, so I
decided to pull it as well and replace it with 9xxx.

So once my background music was restored I went to work on the PS-7. This was a fairly simple repair, final diagnosis being the plastic pin
insulator for one of the power transistors cracked or melted, or both, shorting the Emitter to ground and thereby shorting that transistor's
0.18 ohm equalizing resistor across the 12V OUTPUT causing it to overheat and open up. All this excitement was before either the current or
voltage overload protection, so the primary fuse popped.

Turned out three of the four power transistors were blown, and the fourth wasn't feeling too good. The mounting insulators were only
available in quantities of 100, (at 42 cents each!,) but a phone call to Keystone produced five (sample) pieces the next day via FedEx.
Keystone is THE provider of all those 'bits' it takes to put something together. The transistors, upgraded from 2N5301 to 2N5302, from
Mouser, left only the 0.18 ohm, 15W resistor. NTE has a line of power resistors from 0,10 ohms up, but at only 10W. They don't make a 15W
version, but jump to 20W. Of course the 20W version doesn't start until 0.20 ohms.....
The resistors dissipate about 8W at full load,
so I ended up with two 0.36 ohm, 10W resistors in parallel. I discovered that you can order from Newark, and if not a stock item they will

drop ship from the manufacturer at no charge, just the separate shipping charge. The filter caps still show extremely low ESR and showed no
signs of leakage, so left them alone. The Driver transistor checked ok, but I replaced it on general principles. I let the power supply
burn in for about a week, and this proved interesting as well.

There have been various comments regarding the stability of the TR-7 over the years. What better load for the PS-7 than the TR-7? After a
couple of days I noticed that the frequency seemed very stable, so I carefully set it to 7.050.0, right in between the 0-9 and the 0-1
'flipping', and left it. This is sitting on the bench, top cover removed and in a position where the A/C outlet blows cool air across it at
random. Over the period of a week, morning, day and evening I glanced at it each time I entered or left the room or turned in that
direction, I saw it go to a solid '1' and/or a solid '9' very occasionally. The rest of the time it sat on '0'. That's less than 200 Hz,
and probably less than 150 Hz deviation.

After I finished up the 'other' TR-7 and PS-7 I swapped them out and let those two sit under the same conditions. The results were
essentially the same! I suspect that's a pretty good comment on the stability of at least THESE two radios.

My conclusion is that if your TR-7 is not this stable, I'd be suspicious of the varactor, analog switch and or pot associated with the RIT
circuit that is inside the PTO on ONLY the TR-4CwRIT and the TR-7.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

[Non-text portions of this message have been removed]

14452. Re: [DrakeRadio] Thumper!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 22:22:18 UTC
From: Steve Wedge
Topic: 14446 Message: 14452

I'll check those. I think only the bias supply got a new cap. All the other boards have tantalums on them.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Monday, June 24, 2013 5:48 PM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] Thumper!

I'd bet an AVC cap charging and/or slowing the BIAS supply. The power supply isn't marginal, it's just been superseded by newer methods.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
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Steve Wedge wrote:
> Cold only. I've been listening to it for an hour and a half and it hasn't done it even once.
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> I'm suspecting the low-voltage supply at this point. I've heard that it was marginal to begin with. Maybe temperature-related.
>
> Steve Wedge, W1ES/4
>
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>
>
> From: Garey Barrell
> Sent: Monday, June 24, 2013 4:43 PM
> To: DrakeRadio@yahoogroups.com
> Subject: Re: [DrakeRadio] Thumper!
>
>
>

> Steve -
>
> Well, no I haven't noticed that. Once in a while the typical transformer 'thump' from the initial current surge, but not through the speaker.
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> A 'thump' in the speaker of an AC coupled audio amplifier indicates a single pulse, in this case likely a DC shift. Possibly a result of
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>>
>> Has anyone experienced a similar issue on an R-4C? This one is stone-stock and has been re-capped recently.
>>
>>
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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[Non-text portions of this message have been removed]

14453. Re: [DrakeRadio] TR-7 Stability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 22:44:23 UTC
From: Jim Shorney
Topic: 14370 Message: 14453

150 Hz? My god, how can you stand it?

Seriously though, I agree with your experience. IMO there's no justification for frequency stabilizing gadgets if the radio is working as it should.

73

-Jim
NU0C

On Mon, 24 Jun 2013 16:35:45 -0400, Garey Barrell wrote:

>
>I know we've had this discussion before, but just thought I would stoke the fire a bit.
>
>I just spent some time cleaning up my TR-7's after five some years of trouble-free operation.
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>Well, almost trouble-free. A couple of week ago I had s/n 6xxx sitting on 40M CW for background 'music'. It's there just about every day,
>doing the same thing. While doing something else, I heard a 'sizzle-sizzle POP, silence', accompanied by the wonderful smell of burnt
>electrons. I've already bored you with the trials of first, having my wife get the PS-7 out from under the desk, and the 'spare' one back
>under there. This is the TR-7 that had all but the 300 Hz filter in it, and hadn't been touched since just before the move to VA, so I
>decided to pull it as well and replace it with 9xxx.
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>So once my background music was restored I went to work on the PS-7. This was a fairly simple repair, final diagnosis being the plastic pin
>insulator for one of the power transistors cracked or melted, or both, shorting the Emitter to ground and thereby shorting that transistor's
>0.18 ohm equalizing resistor across the 12V OUTPUT causing it to overheat and open up. All this excitement was before either the current or
>voltage overload protection, so the primary fuse popped.
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>Turned out three of the four power transistors were blown, and the fourth wasn't feeling too good. The mounting insulators were only
>available in quantities of 100, (at 42 cents each!,) but a phone call to Keystone produced five (sample) pieces the next day via FedEx.
>Keystone is THE provider of all those 'bits' it takes to put something together. The transistors, upgraded from 2N5301 to 2N5302, from
>Mouser, left only the 0.18 ohm, 15W resistor. NTE has a line of power resistors from 0,10 ohms up, but at only 10W. They don't make a 15W
>version, but jump to 20W. Of course the 20W version doesn't start until 0.20 ohms.....
The resistors dissipate about 8W at full load,

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>drop ship from the manufacturer at no charge, just the separate shipping charge. The filter caps still show extremely low ESR and showed no
>signs of leakage, so left them alone. The Driver transistor checked ok, but I replaced it on general principles. I let the power supply
>burn in for about a week, and this proved interesting as well.
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>direction, I saw it go to a solid '1' and/or a solid '9' very occasionally. The rest of the time it sat on '0'. That's less than 200 Hz,
>and probably less than 150 Hz deviation.
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>After I finished up the 'other' TR-7 and PS-7 I swapped them out and let those two sit under the same conditions. The results were
>essentially the same! I suspect that's a pretty good comment on the stability of at least THESE two radios.
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>My conclusion is that if your TR-7 is not this stable, I'd be suspicious of the varactor, analog switch and or pot associated with the RIT
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>73, Garey - K4OAH
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>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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><www.k4oah.com>
>
>
>

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"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

14454. Re: [DrakeRadio] TR-7 Stability

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 23:13:49 UTC
From: john
Topic: 14370 Message: 14454

I agree entirely. I think that's why a knob was provided conveniently on
the front panel.

;-)

John K5MO

At 06:44 PM 6/24/2013, Jim Shorney wrote:

>150 Hz? My god, how can you stand it?
>
>Seriously though, I agree with your experience. IMO there's no justification
>for frequency stabilizing gadgets if the radio is working as it should.
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>-Jim
>NU0C
>
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> >
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> >
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>
>"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"
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>Yahoo! Groups Links
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14455. Re: [DrakeRadio]

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 23:18:20 UTC
From: Wolfgang (VK3WY)
Topic: 14455 Message: 14455

Yes David it is the one....

73's Wolf

----- Original Message -----
From: "David Winfree" <dmw11038@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Tuesday, June 25, 2013 2:45 AM
Subject: Re: [DrakeRadio]

> Hi. This is the 4 pin round on back of r4?
>
> On Monday, June 24, 2013, Wolfgang (VK3WY) wrote:
>
>> **
>>
>>
>> Hi Group
>>
>> I have a limited stock of NO 4 pin accessory plugs $ 5.00 each plus
>> postage.
>>
>> Wolf (VK3WY)
>>
>> [Non-text portions of this message have been removed]
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> [Non-text portions of this message have been removed]
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>
> Yahoo! Groups Links
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14456. Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 23:26:09 UTC
From: qrpcwop
Topic: 14433 Message: 14456

A TR-7 for FD? A rig without a uP, menus, RS-232, USB, Ethernet, DSP, etc,? How did folks survive the weekend?

Al, K2ZN

14457. Re: [DrakeRadio] Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-24 23:56:28 UTC
From: Steve Wedge
Topic: 14433 Message: 14457

I'm thinking of going solo or a small group next year with my B-Twins.

Anyone near central NC is welcome to come and enjoy...

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 24, 2013, at 7:26 PM, "qrpcwop" <k2zn@...> wrote:

> A TR-7 for FD? A rig without a uP, menus, RS-232, USB, Ethernet, DSP, etc,? How did folks survive the weekend?
>
> Al, K2ZN
>
>

[Non-text portions of this message have been removed]

14458. Re: [DrakeRadio] Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 00:32:12 UTC
From: el34guy@...
Topic: 14433 Message: 14458

My tr7 has dsp, External of course!!

Mark
W0NCL

-----Original Message-----
From: qrpcwop <k2zn@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Mon, Jun 24, 2013 6:26 pm
Subject: [DrakeRadio] Re: TR-7 at Field Day

A TR-7 for FD? A rig without a uP, menus, RS-232, USB, Ethernet, DSP, etc,?
How did folks survive the weekend?

Al, K2ZN

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14459. Re: [DrakeRadio] Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 00:34:27 UTC
From: Keith R. Erickson
Topic: 14433 Message: 14459

KISS!

Sent from my iPad

On Jun 24, 2013, at 6:26 PM, "qrpcwop" <k2zn@rochester.rr.com> wrote:

> A TR-7 for FD? A rig without a uP, menus, RS-232, USB, Ethernet, DSP, etc,? How did folks survive the weekend?
>
> Al, K2ZN
>
>

[Non-text portions of this message have been removed]

14460. Re: [DrakeRadio] Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 02:11:15 UTC
From: Jim Shorney
Topic: 14433 Message: 14460

Heck, quite a few of them can't even figure out what the PBT knob is for!

73

-Jim
NU0C

On Mon, 24 Jun 2013 23:26:09 -0000, qrpcwop wrote:

>A TR-7 for FD? A rig without a uP, menus, RS-232, USB, Ethernet, DSP, etc,? How did folks survive the weekend?
>
>Al, K2ZN

--

"I aim to misbehave." - Captain Malcolm Reynolds, "Serenity"

14461. Re: [DrakeRadio] Re: TR-7 at Field Day

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 02:12:51 UTC
From: Jim Shorney
Topic: 14433 Message: 14461

On Mon, 24 Jun 2013 20:32:12 -0400 (EDT), el34guy@... wrote:

>
>My tr7 has dsp, External of course!!

As does mine. But we didn't use it at FD. When you are contesting on a 4-element HyGain 20 Meter monoband Yagi, ALL of the signals are above the noise floor!

73

-Jim
NU0C

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14462. New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 07:34:28 UTC
From: DrakeRadio@yahoogroups.com
Topic: 14 Message: 14462

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the DrakeRadio
group.

File : /Drake R4B Voltage Resistance.xls
Uploaded by : w7jpg <ckepus@...>
Description : Drake R-4B Voltage Resistance Table

You can access this file at the URL:
http://groups.yahoo.com/group/DrakeRadio/files/Drake%20R4B%20Voltage%20Resistance.xls

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

w7jpg <ckepus@...>

14463. Re: [DrakeRadio] Side Tone Mod

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-05 02:31:43 UTC
From: Richard Knoppow
Topic: 14113 Message: 14463

I saw the mod and wondered what it was for. A little
further reading found that it was for side-tone leakage. My
T4XB does not have this problem so there is no point in
doing the mod. I thought the note was for the T4XC.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...
----- Original Message -----
From: "Charles Ahlgren" <kw6gchas@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Sunday, June 02, 2013 5:57 PM
Subject: Re: [DrakeRadio] Side Tone Mod

>I had this problem with the T4X - not T4C; is that what you
>meant? I got
> the fix from Drake 30 years ago...It seems it was a
> problem with the very
> early models of the T4X; for which I have one....
>
> Hope that helps...
>
> 73's de Charles, KW6G (formerly - WB6IYM)
> http://wb6iym.googlepages.com/coffeemugnet
>
>
> On Sat, Jun 1, 2013 at 1:06 AM, Richard Knoppow
> <1oldlens1@...>wrote:
>
>> **
>>
>>
>> I may have found my own answer. I read through the
>> "Drakemod" document in Garey's CD. The mod is mentioned
>> there as a way to eliminate feedthrough of the CW side
>> tone
>> in standby mainly on the T-4C. I don't have this problem
>> on
>> my T-4XB so, unless its for something else, I will just
>> leave it alone.
>> BTW, if you have the CD make sure to read _everything_
>> in it. There is a lot of hidden wisdom that you will miss
>> if

>> you just look at the instruction books and service
>> manual.
>> If you don't have the CD _get it_!!!
>>
>> --
>> Richard Knoppow
>> Los Angeles
>> WB6KBL
>> dickburk@...
>>

14464. L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-25 21:59:02 UTC
From: k4mt
Topic: 14464 Message: 14464

I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.

The issue I see is the softstart will only work on CW or SSB depending on the position of the CW/SSB switch on power up. From what I see, is there is a good power surge when switching from CW to SSB. So if every time you change the CW/SSB switch you put a big surge on the PS components, is softstart really going to be effective on this amp? I find if I power it up in CW I get hardly no power supply bang.

What am I missing here?

Gary K4MT

14465. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 01:16:27 UTC
From: Jim Shorney
Topic: 14464 Message: 14465

There is a small surge, but it's not anything to be concerned about IMO. The surge that worries everyone is the one that happens when you apply full rectified voltage to completely discharged filter caps. When you switch from CW to SSB, the caps are already partially charged.

I routinely turn on my amps in low power mode, it does reduce the inrush surge quite a bit.

73

-Jim
NU0C

On Tue, 25 Jun 2013 21:59:02 -0000, k4mt wrote:

>I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.
>
>The issue I see is the softstart will only work on CW or SSB depending on the position of the CW/SSB switch on power up. From what I see, is there is a good power surge when switching from CW to SSB. So if every time you change the CW/SSB switch you put a big surge on the PS components, is softstart really going to be effective on this amp? I find if I power it up in CW I get hardly no power supply bang.
>
>What am I missing here?
>
>Gary K4MT
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

14466. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 01:31:05 UTC
From: K9sqg
Topic: 14464 Message: 14466

Gary,

Opinions vary. Personally, my "soft start" is a pair of thermistors installed in the primary circuit of the filament transformer. Too, I have an external on/off switch I use (advertised as soft start but in fact it is not) to ease the burden on switch contacts.

There is an old wives' tale and opinion circulating that the surge from CW to SSB is greater than turning the amp on. Unless one defies the laws of physics, this is virtually impossible. Why? When you turn the amp on in CW, the capacitors are not charged and have to go through several AC cycles to get the HV DC up to 1,800 volts. When you go from CW to SSB, the extra "charging" has to go from 1,800 volts to 2,500 volts. So, in one case you're going from zero (uncharged caps) voltage to 1,880 volts while in the other case the delta (partially charged caps from 1,800 to 2,500 volts) is only 700 volts. Interested parties can do the math.

There is yet another myth being circulated that the 3-500Z is an instant on tube. Sadly, this too is not true even if you read it in the various handbooks and Eimac literature. How can this be? First, if this were true, you would not need a soft-start circuit. So why do companies sell the soft-start circuit and why do some companies put soft start circuits in their 3-500Z amps to save the filaments from onset surge (i.e. a cold filament draws more current than a warm one)? I actually believed this myth. Once I wanted to snag a DX station on the spur of the moment. Hit the on switch then the PTT switch. Trust me, it was not an instant on situation and a couple of hundred dollars later I fixed things. Too, in an "instant on" situation, one is expecting the filament to instantly start emitting electrons at "max" while at the same time attempting to draw plate current. Not a good situation. I guess we're splitting hairs here because even if the tube were instant on, the HV DC is not so the "system" or amp is not instant on. One has to follow one's beliefs. I for one do not believe the tubes are instant on.

On a final note, I talked with an engineer at R. L. Drake when they were in business. He said that the HV DC does not need a soft start circuit because the DC resistance of the HV transformer limits the surge current to the rectifiers and capacitors.

I was pressed for time and didn't want to log onto Yahoo to post the above which for sure would have resulted in me being flamed.

Best of luck and, follow your heart...

73,

Evan

-----Original Message-----
From: k4mt <k4mt@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Jun 25, 2013 6:27 pm
Subject: [DrakeRadio] L-4B Softstart

I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.

The issue I see is the softstart will only work on CW or SSB depending on the position of the CW/SSB switch on power up. From what I see, is there is a good power surge when switching from CW to SSB. So if every time you change the CW/SSB switch you put a big surge on the PS components, is softstart really going to be effective on this amp? I find if I power it up in CW I get hardly no power supply bang.

What am I missing here?

Gary K4MT

[Non-text portions of this message have been removed]

14467. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 02:04:46 UTC
From: Garey Barrell
Topic: 14464 Message: 14467

Evan -

You posted just fine!! And we don't 'FLAME' here..... We may however disagree from time to time! :-)

I put a 'soft-start' consisting of a solid-state delay relay and a DALE wirewound resistor in my L-4B back in th 70's. I set the time delay
so that when the amp is switched on the meter lamps and filaments slowly get brighter for about three seconds, therelay clicks and they go
the rest of the way to full brilliance. It makes a smooth ramp up from dark to full light, and if you didn't see the slight flicker when
the relay closed you'd think it was just slow to warm up!!

I can't say for certain if the 3-500Z's are 'instant on' or not, or whether a soft-start is worthwhile, but the L-4B still has the original
3-500Z's in it, and still puts out 1300 W with no strain.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

K9sqg wrote:
> Gary,
>
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> Opinions vary. Personally, my "soft start" is a pair of thermistors installed in the primary circuit of the filament transformer. Too, I have an external on/off switch I use (advertised as soft start but in fact it is not) to ease the burden on switch contacts.
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> I was pressed for time and didn't want to log onto Yahoo to post the above which for sure would have resulted in me being flamed.
>
>
> Best of luck and, follow your heart...
>
>
> 73,
>
>
> Evan
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>
> -----Original Message-----
> From: k4mt <k4mt@yahoo.com>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Tue, Jun 25, 2013 6:27 pm
> Subject: [DrakeRadio] L-4B Softstart
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> I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.
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power it up in CW I get hardly no power supply bang.
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> Gary K4MT
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14468. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 02:16:16 UTC
From: Jim Shorney
Topic: 14464 Message: 14468

IMO, Evan is spot-on. I never bought into the instant-on thing either. There are other things besides the filaments in those tubes that need to come up to temp. I try to let the amp idle for a few minuted before I hit it with RF. My NCL-2000 doesn't give you a choice, it has a time delay relay for heater warm-up. I'm told that you can pull chunks off the cathode of a ceramic-metal tube if you tre to use it before the heater is up to temp. I've never felt compelled to test that theory.

As for the inrush, I still have a soft-start here in the box (I think I got it from Evan). Someday I'll install it in one amp of another, but the inrush when turning it on in CW mode just doesn't disconcert me all that much.

73

-Jim
NU0C

On Tue, 25 Jun 2013 22:04:46 -0400, Garey Barrell wrote:

>Evan -
>
>You posted just fine!! And we don't 'FLAME' here..... We may however disagree from time to time! :-)
>
>I put a 'soft-start' consisting of a solid-state delay relay and a DALE wirewound resistor in my L-4B back in th 70's. I set the time delay
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>the rest of the way to full brilliance. It makes a smooth ramp up from dark to full light, and if you didn't see the slight flicker when
>the relay closed you'd think it was just slow to warm up!!
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>I can't say for certain if the 3-500Z's are 'instant on' or not, or whether a soft-start is worthwhile, but the L-4B still has the original
>3-500Z's in it, and still puts out 1300 W with no strain.
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>73, Garey - K4OAH
>Glen Allen, VA
>
>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>and TR-4/C Service Supplement CDs
><www.k4oah.com>
>
>K9sqg wrote:
>> Gary,
>>

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>> Opinions vary. Personally, my "soft start" is a pair of thermistors installed in the primary circuit of the filament transformer. Too, I have an external on/off switch I use (advertised as soft start but in fact it is not) to ease the burden on switch contacts.
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>> Best of luck and, follow your heart...
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>> 73,
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>> Evan
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>>
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>> -----Original Message-----
>> From: k4mt <k4mt@...>
>> To: DrakeRadio <DrakeRadio@yahoogroups.com>
>> Sent: Tue, Jun 25, 2013 6:27 pm
>> Subject: [DrakeRadio] L-4B Softstart
>>
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>> I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.
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>> What am I missing here?
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>> Gary K4MT
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>

--
The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

14469. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 02:28:51 UTC
From: K9sqg
Topic: 14464 Message: 14469

Side note prompted by Jim NU0C's posting...

Even if a 3-500Z were instant on, the HV DC is not instant on and takes a small amount of time to come up to full voltage. Being politically correct, it all depends on what you mean by "instant on"...

-----Original Message-----
From: Jim Shorney <jshorney@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Tue, Jun 25, 2013 10:19 pm
Subject: Re: [DrakeRadio] L-4B Softstart

IMO, Evan is spot-on. I never bought into the instant-on thing either. There are other things besides the filaments in those tubes that need to come up to temp. I try to let the amp idle for a few minuted before I hit it with RF. My NCL-2000 doesn't give you a choice, it has a time delay relay for heater warm-up. I'm told that you can pull chunks off the cathode of a ceramic-metal tube if you tre to use it before the heater is up to temp. I've never felt compelled to test that theory.

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>the rest of the way to full brilliance. It makes a smooth ramp up from dark to full light, and if you didn't see the slight flicker when
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>I can't say for certain if the 3-500Z's are 'instant on' or not, or whether a soft-start is worthwhile, but the L-4B still has the original
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>73, Garey - K4OAH
>Glen Allen, VA
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>Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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>K9sqg wrote:
>> Gary,
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>> Opinions vary. Personally, my "soft start" is a pair of thermistors installed in the primary circuit of the filament transformer. Too, I have an external on/off switch I use (advertised as soft start but in fact it is not) to ease the burden on switch contacts.
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>> Best of luck and, follow your heart...
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>> 73,
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>>
>> Evan
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>>
>> -----Original Message-----
>> From: k4mt <k4mt@...>
>> To: DrakeRadio <DrakeRadio@yahoogroups.com>
>> Sent: Tue, Jun 25, 2013 6:27 pm
>> Subject: [DrakeRadio] L-4B Softstart
>>
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>> I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.
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>> Gary K4MT
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The universe we're in will reach absolute zero in three hours. Safe is relative. - Idris, "The Doctor's Wife"

[Non-text portions of this message have been removed]

14470. FS: TR-4 setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 02:45:57 UTC
From: Fernando
Topic: 14470 Message: 14470

Hello.

I'm liquidating my projects.

For your consideration, I have the following as a package:

TR-4 with NB, receives ok but weak output.
RV-4, not working on one position.
AC-4 works but not upgraded.
DC-3 unknown state. But have cable and both
end connectors for the TR-4.
DC-3 second one and unknown state.
MS-4

R4A all there but no receive.
MS-4

Make offer for all as one and don't forget about

shipping and packaging. Local pickup welcome.

Fernando N2FQ/6
n2fq@...

[Non-text portions of this message have been removed]

14471. Re: [DrakeRadio] New file uploaded to DrakeRadio

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 03:29:20 UTC
From: Charles Ring
Topic: 14 Message: 14471

The file is not there

73 de W3NU

On 6/25/2013 0334, DrakeRadio@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the DrakeRadio
> group.
>
> File : /Drake R4B Voltage Resistance.xls
> Uploaded by : w7jpg <ckepus@... <mailto:ckepus%40comcast.net>>
> Description : Drake R-4B Voltage Resistance Table
>
> You can access this file at the URL:
> http://groups.yahoo.com/group/DrakeRadio/files/Drake%20R4B%20Voltage%20Resistance.xls
>
>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
> Regards,
>
> w7jpg <ckepus@... <mailto:ckepus%40comcast.net>>
>

[Non-text portions of this message have been removed]

14472. Re: [DrakeRadio] FS: TR-4 setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 03:54:23 UTC
From: DRogers
Topic: 14470 Message: 14472

Where are you located?

David, WA7ZYQ

--
Sent from my Nook HD tablet with K-9 Mail. Please excuse my brevity.

Fernando <n2fq@...> wrote:

>Hello.
>
>I'm liquidating my projects.
>
>For your consideration, I have the following as a package:
>
>TR-4 with NB, receives ok but weak output.
>RV-4, not working on one position.
>AC-4 works but not upgraded.
>DC-3 unknown state. But have cable and both
> end connectors for the TR-4.
>DC-3 second one and unknown state.
>MS-4
>
>R4A all there but no receive.
>MS-4
>
>Make offer for all as one and don't forget about
>
>shipping and packaging. Local pickup welcome.
>
>
>Fernando N2FQ/6
>n2fq@...
>
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>[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14473. RCA Tube manufacturing books

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 07:33:30 UTC
From: Richard Knoppow
Topic: 14473 Message: 14473

I am once again going to recommend the two books on tube manufacture that RCA published for its tube division employees. These are available at http://www.tubebooks.org One was published in 1940 and the other in 1962. I have been reading the later one. It is a treasure of information for those who have more than a casual interest in vacuum tubes. I am posting to this list because many here have asked about problems with the tubes Drake chose to use for the final amplifiers in several of the rigs. There is also some enlightenment on high power tubes. Reading will demonstrate that tubes were far from trivial to make. RCA seems to have been genuinely concerned with quality and life. You will learn what a sealex machine was and at least something about getters and how they were applied and work and some problems with heaters and cathodes.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14474. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 10:32:07 UTC
From: john
Topic: 14464 Message: 14474

Details of this would be great Garey!

John

At 10:04 PM 6/25/2013, you wrote:
>Evan -
>
>You posted just fine!! And we don't 'FLAME' here..... We may however
>disagree from time to time! :-)
>
>I put a 'soft-start' consisting of a solid-state delay relay and a DALE
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>K9sqg wrote:
> > Gary,
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> > Opinions vary. Personally, my "soft start" is a pair of thermistors
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> in CW, the capacitors are not charged and have to go through several AC
> cycles to get the HV DC up to 1,800 volts. When you go from CW to SSB,
> the extra "charging" has to go from 1,800 volts to 2,500 volts. So, in

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> were true, you would not need a soft-start circuit. So why do companies
> sell the soft-start circuit and why do some companies put soft start
> circuits in their 3-500Z amps to save the filaments from onset surge
> (i.e. a cold filament draws more current than a warm one)? I actually
> believed this myth. Once I wanted to snag a DX station on the spur of
> the moment. Hit the on switch then the PTT switch. Trust me, it was not
> an instant on situation and a couple of hundred dollars later I fixed
> things. Too, in an "instant on" situation, one is expecting the filament
> to instantly start emitting electrons at "max" while at the same time
> attempting to draw plate current. Not a good situation. I guess we're
> splitting hairs here because even if the tube were instant on, the HV DC
> is not so the "system" or amp is not instant on. One has to follow one's
> beliefs. I for one do not believe the tubes are instant on.
> >
> >
> > On a final note, I talked with an engineer at R. L. Drake when they
> were in business. He said that the HV DC does not need a soft start
> circuit because the DC resistance of the HV transformer limits the surge
> current to the rectifiers and capacitors.
> >
> >
> > I was pressed for time and didn't want to log onto Yahoo to post the
> above which for sure would have resulted in me being flamed.
> >
> >
> > Best of luck and, follow your heart...
> >
> >
> > 73,
> >
> >
> > Evan
> >
> >
> >
> >
> >
> > -----Original Message-----
> > From: k4mt <k4mt@...>
> > To: DrakeRadio <DrakeRadio@yahoogroups.com>
> > Sent: Tue, Jun 25, 2013 6:27 pm
> > Subject: [DrakeRadio] L-4B Softstart

> >
> >
> >
> >
> >
> >
> > I have been looking at adding softstart to my L-4B. One thing I notice
> is the logical place to add the softstart relay is between the power
> switch and the CW/SSB wiper.
> >
> > The issue I see is the softstart will only work on CW or SSB depending
> on the position of the CW/SSB switch on power up. From what I see, is
> there is a good power surge when switching from CW to SSB. So if every
> time you change the CW/SSB switch you put a big surge on the PS
> components, is softstart really going to be effective on this amp? I
> find if I power it up in CW I get hardly no power supply bang.
> >
> > What am I missing here?
> >
> > Gary K4MT
> >
>
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>------------------------------------
>
>Yahoo! Groups Links
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14475. "Thumper" update.

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 11:22:33 UTC
From: Steve Wedge
Topic: 14475 Message: 14475

So far this morning, no "THUMP!".

I re-flowed the solder around the new can caps' tabs and soldered a second tab on the low-voltage supply to the chassis (it was moving a little when I pressed on it). I also re-flowed the solder on the tab of the HV cap.

The set has been running normally for about 20 minutes so far.

I'm glad I don't have to look for an intermittent component

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14476. Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 12:01:52 UTC
From: Steve Wedge
Topic: 14476 Message: 14476

Some observations I've been making suggest that it's probably better to use grease in the PTO bearings and not light oil.

All of the really "mint" or near-mint rigs I've seen lately have no contaminants on the Nylon gears. All of these PTO's still have grease visible around the bearings.

All of the sets I've seen with oily Nylon gears have very little grease on these bearings but do have signs of oil.

Since petroleum oil is known to distort Nylon over time, I'm forming a hypothesis that at least some Nylon gear deforming issues came from a well-intentioned owner or repair person applying oil to the bearings. The oil inevitably leaks out the front and dribbles down the pinion gear, where it then transfers to oil to the Nylon gear.

Perhaps Bill Frost would know the answer to this as far as what was used at the factory (including the type of grease). That R-4 I had and several other sets in excellent condition still had grease in place (and it was not congealed). Those sets, I've merely added a small amount of grease to. I know from now on, when I need to clean out dried grease, I'll be taking the whole thing apart and using grease on reassembly. It also will help with keeping those pesky ball bearings in place during reassembly!

73,

Steve Wedge, W1ES/4

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All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14477. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 12:56:02 UTC
From: GALE STEWARD
Topic: 14464 Message: 14477

I had a Softstart module in my L4 for awhile but removed it after I had a problem with it. I repaired it but never reinstalled it. I used the under chassis space to install a solid state AC relay to take the high AC current load off of the L4 front panel switches.

I also built and installed a bias board (operating bias and cutoff bias). I never cared for the design that Drake used in the L4/L4PS in that they use a tap on the low end of the bleeder resistor string to obtain the cutoff bias for the tubes. If the bleeder string opens (a common problem) you can lose the tube cutoff bias voltage.

73, Stew K3ND

From: Jim Shorney <jshorney@...>
To: "DrakeRadio@yahoogroups.com" <DrakeRadio@yahoogroups.com>
Sent: Tuesday, June 25, 2013 9:16 PM
Subject: Re: [DrakeRadio] L-4B Softstart

There is a small surge, but it's not anything to be concerned about IMO. The surge that worries everyone is the one that happens when you apply full rectified voltage to completely discharged filter caps. When you switch from CW to SSB, the caps are already partially charged.

I routinely turn on my amps in low power mode, it does reduce the inrush surge quite a bit.

73

-Jim
NU0C

On Tue, 25 Jun 2013 21:59:02 -0000, k4mt wrote:

>I have been looking at adding softstart to my L-4B. One thing I notice is the logical place to add the softstart relay is between the power switch and the CW/SSB wiper.
>
>The issue I see is the softstart will only work on CW or SSB depending on the position of the CW/SSB switch on power up. From what I see, is there is a good power surge when switching from CW to SSB. So if every time you change the CW/SSB switch you put a big surge on the PS components, is softstart really going to be effective on this amp? I find if I power it up in CW I get hardly no power supply bang.
>
>What am I missing here?
>
>Gary K4MT
>
>

--
Ham Radio NU0C
Lincoln, Nebraska, U.S.S.A.
TR7/RV7/R7A/L7, TR6/RV6, T4XC/R4C/L4B, NCL2000, SB104A, R390A, GT550A/RV550A, HyGain 3750, IBM PS/2 - all vintage, all the time!

"Give a man a URL, and he will learn for an hour; teach him to Google, and he will learn for a lifetime."

HyGain 3750 User's Group - http://groups.yahoo.com/group/HyGain_3750/
http://incolor.inetnebr.com/jshorney
http://www.nebraskaghosts.org

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14478. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 14:27:15 UTC
From: K9sqg
Topic: 14476 Message: 14478

While I've not had the need to make decisions about oil versus grease on Drake radios, in similar applications with brass or steel gears I have used a silicon based grease made by GE; the originals ones I'm not sure where I bought them, but in recent years I found some at Surplus Sales of Nebraska. In some instances, I have applied the grease over 20 (yes, twenty) years ago and it still provides lubrication like always, hasn't hardened, etc. It came in three viscosities--light, medium, and firm. Not sure if it is compatible with other lubricants and I have never used it on nylon gears. Just sharing an experience...

Enjoy those Drakes!

73.

Evan, K9SQG

-----Original Message-----
From: Steve Wedge <w1es1982@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Wed, Jun 26, 2013 8:08 am
Subject: [DrakeRadio] Grease vs oil in the PTO

Some observations I've been making suggest that it's probably better to use grease in the PTO bearings and not light oil.

All of the really "mint" or near-mint rigs I've seen lately have no contaminants on the Nylon gears. All of these PTO's still have grease visible around the bearings.

All of the sets I've seen with oily Nylon gears have very little grease on these bearings but do have signs of oil.

Since petroleum oil is known to distort Nylon over time, I'm forming a hypothesis that at least some Nylon gear deforming issues came from a well-intentioned owner or repair person applying oil to the bearings. The oil inevitably leaks out the front and dribbles down the pinion gear, where it then transfers to oil to the Nylon gear.

Perhaps Bill Frost would know the answer to this as far as what was used at the factory (including the type of grease). That R-4 I had and several other sets in excellent condition still had grease in place (and it was not congealed). Those sets, I've merely added a small amount of grease to. I know from now on, when I need to clean out dried grease, I'll be taking the whole thing apart and using grease on reassembly. It also will help with keeping those pesky ball bearings in place during reassembly!

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14479. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 15:11:58 UTC
From: <pulsarxp@...>
Topic: 14476 Message: 14479

I purchased a new C line from Drake when they first came out. I immediately had PTO dial problems. The mechanisms would bind up. I wound up getting three PTOs installed before my PTO problems went away. This was the beginning of plastic gears for Drake. I was told the following by Drake:
1. Never run the PTO to the end stops and bang the VFO dial against the stop. (This is what killed my three PTOs. I don't know if the "banging" distorted the gears or not, but I suspect this is what caused my binding problem). After I stopped doing this I had no more problems.
2. Sometime later I was told by Drake to NEVER put any lubrication on the plastic gears as they will swell and cause the mechanism to bind. (I never did this to my PTOs, so I never experienced this problem).

I've followed these instructions to this date and never have had another PTO problem except for some problems inherited from later equipment acquisitions.

I think it was even Bill Frost who told me some or all of this information.

Lee, w0vt

[Non-text portions of this message have been removed]

14480. Re: [DrakeRadio] TR-4 setup

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 16:13:08 UTC
From: Fernando
Topic: 14470 Message: 14480

San Jose, CA 95123

Fernando N2FQ/6
n2fq@...

On Jun 25, 2013, at 8:54 PM, DRogers <wa7zyq@...> wrote:

> Where are you located?
>
> David, WA7ZYQ
>
> --
> Sent from my Nook HD tablet with K-9 Mail. Please excuse my brevity.
>
> Fernando <n2fq@...> wrote:
>
>> Hello.
>>
>> I'm liquidating my projects.
>>
>> For your consideration, I have the following as a package:
>>
>> TR-4 with NB, receives ok but weak output.
>> RV-4, not working on one position.
>> AC-4 works but not upgraded.
>> DC-3 unknown state. But have cable and both
>> end connectors for the TR-4.
>> DC-3 second one and unknown state.
>> MS-4
>>
>> R4A all there but no receive.
>> MS-4
>>
>> Make offer for all as one and don't forget about
>>
>> shipping and packaging. Local pickup welcome.
>>
>>
>> Fernando N2FQ/6
>> n2fq@...
>>
>>
>>
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14481. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 18:33:31 UTC
From: Garey Barrell
Topic: 14476 Message: 14481

There are special greases, probably not petroleum based, that are intended for nylongears. I've never seen any, but supposedly they're out
there. Everything I've seen says that nylongears do NOT require lubrication, they are naturally slippery enough to not need it. I suppose
you could put vegetable oil on them if you wish, and your receiver could smell like popcorn!

Oil running down the front of the gearbox from the ball bearings merely indicates that too much oil has been applied by one of the 'if a
little is good, a LOT must be better' brigade. Less than a full drop is plenty. Same for the lead screw, and the rider bar should NOT be
lubricated at all.

The grease used initially at the factory was said to be axle grease, as used to pack front wheel bearings on cars. It was fairly sticky,
and those of you who have repacked bearings know what it looks like when it gets old. The stickiness gave the tuning a smooth feel without
the expense of a flywheel or weighted knob.

Grease is not required for lubrication purposes as the load on the bearings is so light. The best argument FOR grease on the ball bearings
is that it holds the suckers in place while you finish assembly! :-)

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Some observations I've been making suggest that it's probably better to use grease in the PTO bearings and not light oil.
>
> All of the really "mint" or near-mint rigs I've seen lately have no contaminants on the Nylon gears. All of these PTO's still have grease visible around the bearings.
>
> All of the sets I've seen with oily Nylon gears have very little grease on these bearings but do have signs of oil.
>
> Since petroleum oil is known to distort Nylon over time, I'm forming a hypothesis that at least some Nylon gear deforming issues came from a well-intentioned owner or repair person applying oil to the bearings. The oil inevitably leaks out the front and dribbles down the pinion gear, where it then transfers to oil to the Nylon gear.
>
> Perhaps Bill Frost would know the answer to this as far as what was used at the factory

(including the type of grease). That R-4 I had and several other sets in excellent condition still had grease in place (and it was not congealed). Those sets, I've merely added a small amount of grease to. I know from now on, when I need to clean out dried grease, I'll be taking the whole thing apart and using grease on reassembly. It also will help with keeping those pesky ball bearings in place during reassembly!
>
>

14482. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-26 19:22:50 UTC
From: Richard Knoppow
Topic: 14476 Message: 14482

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 26, 2013 11:33 AM
Subject: Re: [DrakeRadio] Grease vs oil in the PTO

> There are special greases, probably not petroleum based,
> that are intended for nylongears. I've never seen any,
> but supposedly they're out
> there. Everything I've seen says that nylongears do NOT
> require lubrication, they are naturally slippery enough to
> not need it. I suppose
> you could put vegetable oil on them if you wish, and your
> receiver could smell like popcorn!
>
> Oil running down the front of the gearbox from the ball
> bearings merely indicates that too much oil has been
> applied by one of the 'if a
> little is good, a LOT must be better' brigade. Less than
> a full drop is plenty. Same for the lead screw, and the
> rider bar should NOT be
> lubricated at all.
>
> The grease used initially at the factory was said to be
> axle grease, as used to pack front wheel bearings on cars.
> It was fairly sticky,
> and those of you who have repacked bearings know what it
> looks like when it gets old. The stickiness gave the
> tuning a smooth feel without
> the expense of a flywheel or weighted knob.
>
> Grease is not required for lubrication purposes as the
> load on the bearings is so light. The best argument FOR
> grease on the ball bearings
> is that it holds the suckers in place while you finish
> assembly! :-)
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
It would be useful to know what the gears are actually
made of. Both Nylon and Delrin were used for gears but
Delrin is more suitable because it has a very low
coefficient of friction, (its slippery) and very good
dimentional stability, neither of which is true for Nylon.

I did some research on both, Delrin appears to be restant to petroleum products since its recommended for fuel system parts. It probably does not need lubrication. I am not so sure about Nylon, which I think absorbs moisture.
Grease is oil held in a binder. Common binders are metallic soaps. Greases are used where there is not enough movement of the parts to keep an oil film formed. The properties of the binder are very important. Synthetic oils and greases are made from silicone rather than petroleum and have the advantage of being highly resistant to oxidation and evaportion of lighter components but there is a very wide range of petroleum oils and greases some of which are also very long lived and resistant to oxidation or chemical break down.
My understanding is that neither Delrin or brass needs lubrication.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14483. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 01:21:25 UTC
From: Steve Wedge
Topic: 14476 Message: 14483

I do suppose if you want an extremely light touch on the knob, you could use the same sort of lube that skateboarders use on their wheel bearings and set the tension for minimum without side-play. It's a PTFE lube designed for the wheel bearings in skateboards. I wish I still had the tube that my younger son had left somewhere but it disappeared when we moved to NC. The stuff was wicked expensive!

I've found that the tube of moly-based CV joint grease works well (I'm using the stuff on the PBT as well). It's definitely less stiff than wheel bearing or even GP grease.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Garey Barrell
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, June 26, 2013 2:33 PM
Subject: Re: [DrakeRadio] Grease vs oil in the PTO

There are special greases, probably not petroleum based, that are intended for nylongears. I've never seen any, but supposedly they're out
there. Everything I've seen says that nylongears do NOT require lubrication, they are naturally slippery enough to not need it. I suppose
you could put vegetable oil on them if you wish, and your receiver could smell like popcorn!

Oil running down the front of the gearbox from the ball bearings merely indicates that too much oil has been applied by one of the 'if a
little is good, a LOT must be better' brigade. Less than a full drop is plenty. Same for the lead screw, and the rider bar should NOT be
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Grease is not required for lubrication purposes as the load on the bearings is so light. The best argument FOR grease on the ball bearings
is that it holds the suckers in place while you finish assembly! :-)

73, Garey - K4OAH
Glen Allen, VA

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<www.k4oah.com>

Steve Wedge wrote:
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>
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>
>

[Non-text portions of this message have been removed]

14484. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 02:24:30 UTC
From: Richard Knoppow
Topic: 14476 Message: 14484

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 26, 2013 6:21 PM
Subject: Re: [DrakeRadio] Grease vs oil in the PTO

>I do suppose if you want an extremely light touch on the
>knob, you could use the same sort of lube that
>skateboarders use on their wheel bearings and set the
>tension for minimum without side-play. It's a PTFE lube
>designed for the wheel bearings in skateboards. I wish I
>still had the tube that my younger son had left somewhere
>but it disappeared when we moved to NC. The stuff was
>wicked expensive!
>
> I've found that the tube of moly-based CV joint grease
> works well (I'm using the stuff on the PBT as well). It's
> definitely less stiff than wheel bearing or even GP
> grease.
>
> Steve Wedge, W1ES/4

There are some interesting lubricants in hobby shops
that cater to model railroaders. There are shops that
specialize in skateboards, one might have the stuff you
want.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14485. Re: Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 14:32:54 UTC
From: w6mqi
Topic: 14476 Message: 14485

If the gears are nylon I wouldn't think that any type of lube would be needed. Delrin is much harder then nylon and a little silicon based grease probably wouldn't hurt. Here's a product that some printer repair shops use http://www.fuchs.com/fuchs_chemplex.php Chemplex 710. The gears on my R4C are dry no lube at all and the PTO spins fairly easily, The T4XC is another story someone in the past put some sort of grease on the gears and now even after a complete over haul I still can't get a smooth running PTO. So I would just clean the gears with soap and water and reassemble dry and hope for the best that the gears haven't swelled up from improper use of grease.
Gotta love that B-line the PTO's on these are smooth as silk!

73,Dave
W6MQI

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Some observations I've been making suggest that it's probably better to use grease in the PTO bearings and not light oil.
>
> All of the really "mint" or near-mint rigs I've seen lately have no contaminants on the Nylon gears. All of these PTO's still have grease visible around the bearings.
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>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>

>
> [Non-text portions of this message have been removed]
>

14486. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 14:09:38 UTC
From: Garey Barrell
Topic: 14464 Message: 14486

John -

I went to my files and pulled out the drawing for this modification. The relay I used was a P & B CUA-42-70120, which was found in a
surplus store in VA in 1978! This 'was' a 120V, 120 second delay relay, but after I opened it up and selected a new resistor it became a
4.5 second delay! The L-4B was wired for 240 VAC, so I put a 5k, 10W Dale resistor in series with the coil. The N.O. contacts were placed
across a 150 ohm, 50W Dale resistor in series with the AC input of the AMP. Both Dale resistors were the gold, metal case designed to be
bolted to a metal plate. The nice thingis that if the power drops out, the relay resets immediately, so the time delay applies even if
power is reapplied immediately.

As I recall, the relay was $2 and the resistors were $1 each, all at surplus.

Now the bad news....

The relay now is $140 from Newark...! The resistors are $3 and $8 respectively... So one of the current products would probably be a better
approach! :-) Looking through the information in the file, it became apparent to me that I was more interested in protecting the power
switch than the amplifier or power supply. Along those lines, the original switches are still in place aswell.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

john wrote:
> Details of this would be great Garey!
>
> John
>
>
> At 10:04 PM 6/25/2013, you wrote:
>> Evan -
>>
>> You posted just fine!! And we don't 'FLAME' here..... We may however
>> disagree from time to time! :-)
>>
>> I put a 'soft-start' consisting of a solid-state delay relay and a DALE
>> wirewound resistor in my L-4B back in th 70's. I set the time delay
>> so that when the amp is switched on the meter lamps and filaments slowly

>> get brighter for about three seconds, therelay clicks and they go
>> the rest of the way to full brilliance. It makes a smooth ramp up from
>> dark to full light, and if you didn't see the slight flicker when
>> the relay closed you'd think it was just slow to warm up!!
>>
>> I can't say for certain if the 3-500Z's are 'instant on' or not, or
>> whether a soft-start is worthwhile, but the L-4B still has the original
>> 3-500Z's in it, and still puts out 1300 W with no strain.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>>

14487. Re: [DrakeRadio] Re: Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 17:38:09 UTC
From: Richard Knoppow
Topic: 14476 Message: 14487

----- Original Message -----
From: "w6mqi" <w6mqi@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 7:32 AM
Subject: [DrakeRadio] Re: Grease vs oil in the PTO

> If the gears are nylon I wouldn't think that any type of
> lube would be needed. Delrin is much harder then nylon and
> a little silicon based grease probably wouldn't hurt.
> Here's a product that some printer repair shops use
> http://www.fuchs.com/fuchs_chemplex.php Chemplex 710. The
> gears on my R4C are dry no lube at all and the PTO spins
> fairly easily, The T4XC is another story someone in the
> past put some sort of grease on the gears and now even
> after a complete over haul I still can't get a smooth
> running PTO. So I would just clean the gears with soap and
> water and reassemble dry and hope for the best that the
> gears haven't swelled up from improper use of grease.
> Gotta love that B-line the PTO's on these are smooth as
> silk!
>
>
> 73,Dave
> W6MQI

Delrin has lower friction than Nylon and better
resistance to abrasion and wear. Delrin does not usually
need lubricant. I wonder if the gears were made of Nylon
since Delrin is a better material for mechanical parts and
was certainly available at the time.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14488. Drake repair in or around Los Angeles?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 17:50:46 UTC
From: billykatzz
Topic: 14488 Message: 14488

I have a set of B-Twins and the AC4 power supply I've been meaning to ship to Jeff Covelli for service. Only thing is: the shipping out and back is going to cost about $200.

Nothing against Jeff, he's the best, but are there any other service or repair guys around here in So Cal, specifically the Los Angeles area, that are knowledgeable about Drakes?

Thanks, guys!

Bill, NK6Q
Pasadena

14489. Re: [DrakeRadio] Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 11:19:11 UTC
From: Steve Wedge
Topic: 14476 Message: 14489

Just speculating, actually, Richard. I'm happy with the CV grease. It's also very good at keeping the parts from corroding.

Steve Wedge, W1ES/4

"I can't complain, but sometimes I still do."
- Joe Walsh

If the above message appears, it came from Steve's Son of Laptop!
----- Original Message -----
From: Richard Knoppow
To: DrakeRadio@yahoogroups.com
Sent: Wednesday, June 26, 2013 10:24 PM
Subject: Re: [DrakeRadio] Grease vs oil in the PTO

----- Original Message -----
From: "Steve Wedge" <w1es1982@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Wednesday, June 26, 2013 6:21 PM
Subject: Re: [DrakeRadio] Grease vs oil in the PTO

>I do suppose if you want an extremely light touch on the
>knob, you could use the same sort of lube that
>skateboarders use on their wheel bearings and set the
>tension for minimum without side-play. It's a PTFE lube
>designed for the wheel bearings in skateboards. I wish I
>still had the tube that my younger son had left somewhere
>but it disappeared when we moved to NC. The stuff was
>wicked expensive!
>
> I've found that the tube of moly-based CV joint grease
> works well (I'm using the stuff on the PBT as well). It's
> definitely less stiff than wheel bearing or even GP
> grease.
>
> Steve Wedge, W1ES/4

There are some interesting lubricants in hobby shops
that cater to model railroaders. There are shops that
specialize in skateboards, one might have the stuff you
want.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

[Non-text portions of this message have been removed]

14490. Re: [DrakeRadio] Drake repair in or around Los Angeles?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:02:58 UTC
From: Dan Galligan
Topic: 14488 Message: 14490

Bill,
You might contact John Klewer N6AX (call sign at speakeasy dot net), down in Placentia. I had formerly been told that he didn't work on the older stuff, but he recently fixed an FT-101E, for a friend, so he might be amenable, to a set of "B" Twins.
Otherwise, there is a fellow, up in the Antelope Valley, who does work, on newer, and older, rigs. I'll see if I can find out more info, on him. He repaired an SGC SmartCube for me, and I was very happy with the results. But, I can't find his contact info, right now.

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

[Non-text portions of this message have been removed]

14491. Re: [DrakeRadio] Re: Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:05:12 UTC
From: Garey Barrell
Topic: 14476 Message: 14491

Richard -

I don't know how to tell the difference without touching a hot soldering iron to a gear!! :-) I 'think' Nylon will 'char' and/or burn
while Delrin just melts.??

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "w6mqi" <w6mqi@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 7:32 AM
> Subject: [DrakeRadio] Re: Grease vs oil in the PTO
>
>
>> If the gears are nylon I wouldn't think that any type of
>> lube would be needed. Delrin is much harder then nylon and
>> a little silicon based grease probably wouldn't hurt.
>> Here's a product that some printer repair shops use
>> http://www.fuchs.com/fuchs_chemplex.php Chemplex 710. The
>> gears on my R4C are dry no lube at all and the PTO spins
>> fairly easily, The T4XC is another story someone in the
>> past put some sort of grease on the gears and now even
>> after a complete over haul I still can't get a smooth
>> running PTO. So I would just clean the gears with soap and
>> water and reassemble dry and hope for the best that the
>> gears haven't swelled up from improper use of grease.
>> Gotta love that B-line the PTO's on these are smooth as
>> silk!
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>> 73,Dave
>> W6MQI
> Delrin has lower friction than Nylon and better
> resistance to abrasion and wear. Delrin does not usually
> need lubricant. I wonder if the gears were made of Nylon
> since Delrin is a better material for mechanical parts and
> was certainly available at the time.
>
>

>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
>
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> ------------------------------------
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> Yahoo! Groups Links
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14492. L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:20:53 UTC
From: k4mt
Topic: 14492 Message: 14492

I have read that 3-500Z tubes get maximum life when operated full throttle with 100 watts drive and amp in SSB position. Others say operating at lower drive and lower output puts less stress on the tubes and they therefore last longer.

Not being a 3-500Z expert I have pondered each view, tube specs etc and I can not reach a conclusion. What do the experts here think is best operation for the expensive 3-500Z tubes. I know about Fil voltage etc I am just interested in full vs lower power effects on tube life.

Gary K4MT

14493. Re: [DrakeRadio] Drake repair in or around Los Angeles?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:41:14 UTC
From: Dan Galligan
Topic: 14488 Message: 14493

Bill,
Here's what I found about the fellow in the Antelope Valley:
http://www.eham.net/reviews/detail/1705
Now, all of the reviews seem to be very glowing. But, I have heard a couple of folks, who were unhappy, but, apparently they didn't feel strongly enough, to write a review, so, who knows?

73,
Dan
W3RXO/W6
Evening Shade, OK
EM25no

In tough economic times, it is purported to be beneficial to invest in precious metals, like platinum, gold and silver.
Personally, I choose to invest in blued steel, brass, and copper jacketed lead.
As well as, classic old, vacuum tube ham radios.

The problem with socialism is, that you will eventually run out of other peoples' money.
Margaret Thatcher

Sent from my iPad.

On Jun 27, 2013, at 10:50, billykatzz <rsilvercat@...> wrote:

> I have a set of B-Twins and the AC4 power supply I've been meaning to ship to Jeff Covelli for service. Only thing is: the shipping out and back is going to cost about $200.
>
> Nothing against Jeff, he's the best, but are there any other service or repair guys around here in So Cal, specifically the Los Angeles area, that are knowledgeable about Drakes?
>
> Thanks, guys!
>
> Bill, NK6Q
> Pasadena
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

14494. Re: [DrakeRadio] L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:55:30 UTC
From: Jim Wiley
Topic: 14492 Message: 14494

Operate the tubes within their specified limits, never, ever, exceed maximum allowable grid current, and keep the envelope and seals cool, and the tubes will outlast you, even if run at max amateur (ICAS) ratings. Consider that in commercial service a 3-500Z will last for 5 years or more when run 24/7 at max commercial (CCS) limits, and translate that to amateur service where the "real" duty cycle is something like 5% when averaged over the life of the tube (you do have to stop to eat and sleep sometime, and maybe even go to work once in a while, right?) - and you can see that a a pair of 3-500Zs will last essentially indefinitely if not abused. I have a Drake L-4B that I purchased circa 1972 or thereabouts, and it still puts out 1300 watts when asked. The only trouble I have ever experienced was a desoldered heater pin due to a faulty socket (not the tube's fault, and I fixed it myself).

- Jim, KL7CC

On 6/27/2013 10:20 AM, k4mt wrote:
>
> I have read that 3-500Z tubes get maximum life when operated full
> throttle with 100 watts drive and amp in SSB position. Others say
> operating at lower drive and lower output puts less stress on the
> tubes and they therefore last longer.
>
> Not being a 3-500Z expert I have pondered each view, tube specs etc
> and I can not reach a conclusion. What do the experts here think is
> best operation for the expensive 3-500Z tubes. I know about Fil
> voltage etc I am just interested in full vs lower power effects on
> tube life.
>
> Gary K4MT
>
>
> __._,

[Non-text portions of this message have been removed]

14495. Re: [DrakeRadio] Drake repair in or around Los Angeles?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:10:38 UTC
From: Garey Barrell
Topic: 14488 Message: 14495

Bill -

I don't know of anyone. If you find someone suitable, be sure and let us know. This comes up from timeto time, and with the way freight
charges are increasing it's only going to get worse!!

Any 'competent' repair person should be able to repair Drake 4 Line stuff, there is no unicorn poop in them and most parts are readily
available. A general tune-up can be done very well just by following the procedures in the manual. The power supply is just a rebuild, and
anyone who can read and do a passable job of soldering can do that.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

billykatzz wrote:
> I have a set of B-Twins and the AC4 power supply I've been meaning to ship to Jeff Covelli for service. Only thing is: the shipping out and back is going to cost about $200.
>
> Nothing against Jeff, he's the best, but are there any other service or repair guys around here in So Cal, specifically the Los Angeles area, that are knowledgeable about Drakes?
>
> Thanks, guys!
>
> Bill, NK6Q
> Pasadena
>

14496. Re: [DrakeRadio] L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 18:34:07 UTC
From: Ronald Erickson
Topic: 14492 Message: 14496

As a former broadcast engineer, I think the worse problem is heat. Also, if you have bias voltages, they need to be maintained. I like the idea of using DC filament voltage if it can be afforded. Time delay for start-up high voltage is not bad either. I am not sure of the optimum value, but you can add series resistance to AC filament voltage. You want a series sacrifice resistor like a 20-watt 10 ohm wire-wound resistor in the B+ lead.

On Thu, Jun 27, 2013 at 1:20 PM, k4mt <k4mt@...> wrote:

> **
>
>
> I have read that 3-500Z tubes get maximum life when operated full throttle
> with 100 watts drive and amp in SSB position. Others say operating at lower
> drive and lower output puts less stress on the tubes and they therefore
> last longer.
>
> Not being a 3-500Z expert I have pondered each view, tube specs etc and I
> can not reach a conclusion. What do the experts here think is best
> operation for the expensive 3-500Z tubes. I know about Fil voltage etc I am
> just interested in full vs lower power effects on tube life.
>
> Gary K4MT
>
>
>

--
Ronald D. Erickson, K0IC
712-379-3614
Magic Jack # 712-587-1836
Heartland Hams
Southwest Iowa Amateur Radio Club
Bellevue Amateur Radio Club
ARRL Local Government Liaison
ARRL Public Information Officer
ARRL Technical Specialist
ARRL, the national association for Amateur Radio?
563-263-3097
ronalderickson777@...
10-X #12938 :* EN20iu
ARRL Lifer since 1976
3900 Club #729
Iowa QRP Club #179
QCWA Lifer #30762; Chapters, 25, 123, 210
FCC #PG-17-12556

FISTS CW Club #12484
Straight Key Century Club #2253
30 Meter Digital Group #3932
Breakfast Club via Amateur Radio # 3396 on 03/16/2011
FGBMFI Life Member since 1985
Salvation Army Team Emergency Radio Network member
Pastor license by Universal Life Church, Modesto, CA 10/09/1976
Trying to join the Shenandoah Assembly of God
The Collins Collectors Association #AC07-12075
Courage HANDI-HAM System member
Ex: WN0GDA, WB0GDA, AK0N, AAV7AW
Ex: KMA-AM broadcast engineer 1977-1989.
Ex: SBE Senior Broadcast Engineer #2308 - Radio - AM/FM
IWCC -Clarinda Associate of Arts Degree - 1973
University of Nebraska at Omaha Bachelor of General Studies Degree - 1993
True Full Swedish-American
k0ic@...
www.contactify.com/c521b
Iowa Disabled Lifetime Fisherman until 2032 or so.
Member ARMS Christian Fellowship Group.

[Non-text portions of this message have been removed]

14497. Location

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 19:23:36 UTC
From: Don Cunningham
Topic: 14497 Message: 14497

Dan,

Can you remind me where "Evening Shade, OK" is in relation to something a bit larger?? I have forgotten, and know you told me. I actually live between Hulen and Punkin Center, OK myself, but stay with Duncan or Lawton since folks know where they are more often, HI.

Glad you made the move.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

[Non-text portions of this message have been removed]

14498. Re: [DrakeRadio] L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 19:58:46 UTC
From: K9sqg
Topic: 14492 Message: 14498

Gary,

Well, I've operated 3-500Z amps for over 30 years in the form of L4, L4B, L7, and L75, not to mention an occasional SB-220 and Swan Mark II. I tune my L4B and L7 amps in SSB mode, for maximum output within max grid current for the tubes. Then I use the mic gain control on my transceiver to keep output power at 900 watts PEP output. Given that all of these amps were used, and for which I had no history of use and abuse, I have had no 3-500Z tube failures. Your mileage might vary.

73,

Evan, K9SQG

-----Original Message-----
From: k4mt <k4mt@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Thu, Jun 27, 2013 2:27 pm
Subject: [DrakeRadio] L-4B Tube life Full power or Low Power

I have read that 3-500Z tubes get maximum life when operated full throttle with 100 watts drive and amp in SSB position. Others say operating at lower drive and lower output puts less stress on the tubes and they therefore last longer.

Not being a 3-500Z expert I have pondered each view, tube specs etc and I can not reach a conclusion. What do the experts here think is best operation for the expensive 3-500Z tubes. I know about Fil voltage etc I am just interested in full vs lower power effects on tube life.

Gary K4MT

[Non-text portions of this message have been removed]

14499. Re: [DrakeRadio] Location

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 20:00:56 UTC
From: Dan Galligan
Topic: 14497 Message: 14499

Don,
We are 10 miles east of the dam, at Tenkiller Ferry Lake. The address is a Vian zip code, but that likely doesn't tell you anything more than Evening Shade, does. We are east of the interchange of OK 100/82, at the intersection of D4560 and Evening Shade Rd.
We are still actually in process, but, officially have OK driver licenses and OK voter registration, as well as the address on file with the FCC, so it's official, but not technically accurate.
https://maps.google.com/maps/myplaces?hl=en&ll=35.617116,-94.914322&spn=0.063425,0.076733&ctz=420&t=m&z=14

"If ever a time should come, when vain and aspiring men shall possess the highest seats in Government, our country will stand in need of its experienced patriots to prevent its ruin"-Samuel Adams, Brewer/Patriot

73,
Dan
dgalligan60@...
w3rxo@...

On Jun 27, 2013, at 12:23 PM, Don Cunningham wrote:

Dan,

Can you remind me where "Evening Shade, OK" is in relation to something a bit larger?? I have forgotten, and know you told me. I actually live between Hulen and Punkin Center, OK myself, but stay with Duncan or Lawton since folks know where they are more often, HI.

Glad you made the move.
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14500. Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 20:51:09 UTC
From: k4mt
Topic: 14492 Message: 14500

I have two guys that repair amps and they keep telling me the people who do not run their 3-500z tubes at full output and throttle them back have a much higher tube failure rate than those who run them full output wide open all the time. I can see no literature that supports this claim but they insist that it is true. They are old time tube amp guys, one who was a RF engineer on high power transmitting equipment.

I argued with him but he insists that 3-500z unlike ceramic tubes, were ment to be run al full drive and full output. This makes no sense to me.

Thanks for the feedback.

Gary K4MT

--- In DrakeRadio@yahoogroups.com, K9sqg <k9sqg@...> wrote:
>
> Gary,
>
>
> Well, I've operated 3-500Z amps for over 30 years in the form of L4, L4B, L7, and L75, not to mention an occasional SB-220 and Swan Mark II. I tune my L4B and L7 amps in SSB mode, for maximum output within max grid current for the tubes. Then I use the mic gain control on my transceiver to keep output power at 900 watts PEP output. Given that all of these amps were used, and for which I had no history of use and abuse, I have had no 3-500Z tube failures. Your mileage might vary.
>
>
>
> 73,
>
>
>
> Evan, K9SQG
>
>
>
>
> -----Original Message-----
> From: k4mt <k4mt@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Thu, Jun 27, 2013 2:27 pm
> Subject: [DrakeRadio] L-4B Tube life Full power or Low Power
>
>
>
>
>

>
> I have read that 3-500Z tubes get maximum life when operated full throttle with 100 watts drive and amp in SSB position. Others say operating at lower drive and lower output puts less stress on the tubes and they therefore last longer.
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>
> Gary K4MT
>
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>
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>
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>
>
> [Non-text portions of this message have been removed]
>

14501. Sorry….

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 20:09:35 UTC
From: Dan Galligan
Topic: 14501 Message: 14501

That last message was meant to go directly to Don.

Dan

14502. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 21:57:40 UTC
From: Paul Kraemer
Topic: 14464 Message: 14502

Tempting bait for the engineer with "nothing to do" and a large quantity of cute 120v power relays that I'm pretty sure fit under the L4PS chassis. Leftovers from the appliance control days
BTW, you might want to take a look at ICSOtimer module
These are relatively inexpensive postage stamp size encapsulated thick film circuits with four leads. Two leads are wired in series with a standard relay and by choosing the resistor across the other two leads the relay becomes a user defined time delay relay that times from the application of power and resets on power fail.
Paul K0UYA
----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 9:09 AM
Subject: Re: [DrakeRadio] L-4B Softstart

> John -
>
> I went to my files and pulled out the drawing for this modification. The
> relay I used was a P & B CUA-42-70120, which was found in a
> surplus store in VA in 1978! This 'was' a 120V, 120 second delay relay,
> but after I opened it up and selected a new resistor it became a
> 4.5 second delay! The L-4B was wired for 240 VAC, so I put a 5k, 10W Dale
> resistor in series with the coil. The N.O. contacts were placed
> across a 150 ohm, 50W Dale resistor in series with the AC input of the
> AMP. Both Dale resistors were the gold, metal case designed to be
> bolted to a metal plate. The nice thingis that if the power drops out,
> the relay resets immediately, so the time delay applies even if
> power is reapplied immediately.
>
> As I recall, the relay was $2 and the resistors were $1 each, all at
> surplus.
>
> Now the bad news....
>
> The relay now is $140 from Newark...! The resistors are $3 and $8
> respectively... So one of the current products would probably be a better
> approach! :-) Looking through the information in the file, it became
> apparent to me that I was more interested in protecting the power
> switch than the amplifier or power supply. Along those lines, the
> original switches are still in place aswell.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>

> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> john wrote:
>> Details of this would be great Garey!
>>
>> John
>>
>>
>> At 10:04 PM 6/25/2013, you wrote:
>>> Evan -
>>>
>>> You posted just fine!! And we don't 'FLAME' here..... We may however
>>> disagree from time to time! :-)
>>>
>>> I put a 'soft-start' consisting of a solid-state delay relay and a DALE
>>> wirewound resistor in my L-4B back in th 70's. I set the time delay
>>> so that when the amp is switched on the meter lamps and filaments slowly
>>> get brighter for about three seconds, therelay clicks and they go
>>> the rest of the way to full brilliance. It makes a smooth ramp up from
>>> dark to full light, and if you didn't see the slight flicker when
>>> the relay closed you'd think it was just slow to warm up!!
>>>
>>> I can't say for certain if the 3-500Z's are 'instant on' or not, or
>>> whether a soft-start is worthwhile, but the L-4B still has the original
>>> 3-500Z's in it, and still puts out 1300 W with no strain.
>>>
>>> 73, Garey - K4OAH
>>> Glen Allen, VA
>>>
>>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>>> and TR-4/C Service Supplement CDs
>>> <www.k4oah.com>
>>>
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14503. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 21:11:08 UTC
From: Garey Barrell
Topic: 14492 Message: 14503

Gary -

This is true. Running these tube at full power heats up the plates and causes them to 'getter' (gather and adsorb) gas molecules keeping a
hard vacuum and reducing if not eliminating Grid emission.

Failures are caused by too much Grid current, too little air on the glass-metal seals, and sockets with poor tension. Weak sockets resultin
excess heating, sometimes enough to melt the solder out of the pin, which is a 'runaway' condition. As the solder crystallizes, the
resistance increases, the pin heats, the glass metal seal can no longer be kept cool and things just spiral out of control.

PreWW-II, EIMAC tubes had a reputation for longevity among those who ran them full bore with red hot plates. At that time the plates were
made of tantalum and acted as excellent getters. Those who 'babied' them complained that they had a short working life!

Tantalum plates were discontinued because of cost, but an alloy was designed by EIMAC to give a similar effect.

Running at reduced power also results in higher Grid current, which is one of the ways power tubes are destroyed. When you have your
amplifier tuned properly and Grid current where it should be, reduce the LOAD control and watch the Grid current rise!

There is a lot of good information on the W8JI.com site about amplifiers, tubes, and their foibles....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k4mt wrote:
> I have two guys that repair amps and they keep telling me the people who do not run their 3-500z tubes at full output and throttle them back have a much higher tube failure rate than those who run them full output wide open all the time. I can see no literature that supports this claim but they insist that it is true. They are old time tube amp guys, one who was a RF engineer on high power transmitting equipment.
>
> I argued with him but he insists that 3-500z unlike ceramic tubes, were ment to be run al full drive and full output. This makes no sense to me.
>
> Thanks for the feedback.

>
> Gary K4MT
>
>

14504. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 21:36:29 UTC
From: Richard Knoppow
Topic: 14492 Message: 14504

----- Original Message -----
From: "k4mt" <k4mt@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 1:51 PM
Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

>I have two guys that repair amps and they keep telling me
>the people who do not run their 3-500z tubes at full output
>and throttle them back have a much higher tube failure rate
>than those who run them full output wide open all the time.
>I can see no literature that supports this claim but they
>insist that it is true. They are old time tube amp guys,
>one who was a RF engineer on high power transmitting
>equipment.
>
> I argued with him but he insists that 3-500z unlike
> ceramic tubes, were ment to be run al full drive and full
> output. This makes no sense to me.
>
> Thanks for the feedback.
>
> Gary K4MT

I think this may be the belief that the plates must run very hot for the gettering action to function. It may have been true of the tantalum plates used in the 1930s and 1940s but not the type which has been used since. Glass tubes do tend to become gassy durring long storage but that is due to leakage around the seals. Ceramic tubes last forever. I think Eimac has data somewhere about tube ratings and life. Worth looking for. I can't see that pushing a tube right to its limit all the time would do anything but shorten its life. The main limit on life of a tube, assuming its not damaged by excessive heat, is the emission of the cathode. Excessive output will tend to shorten cathode life. The other problem is heating of the grids from excessive secondary emission or dissipation. If they get hot enough they can sag or warp. Another problem is inadequate cooling of the seals which will eventually cause leaks. There is a reason for two sets of ratings on many tubes, the CCS and ICAS. Generally, CCS ratings result in longer life. ICAS is given for reasons of economy where the tube is not going to be run hard for very long at a time. CCS is for _continuous_ service so the ratings are rather lower.

I wonder if your RF engineer friend can give you some
sort of citation about this. I could be wrong but my opinion
is based on reading engineering recommendations from Eimac
and RCA.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14505. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 23:03:44 UTC
From: Don Cunningham
Topic: 14464 Message: 14505

Okay, Paul, I'm ready for a good design like that. I have some switch repair kits I bought recently, but after looking at them, I'd just as soon not have to use them!!!!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

[Non-text portions of this message have been removed]

14506. Re: [DrakeRadio] Re: Grease vs oil in the PTO

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 23:37:42 UTC
From: Steve Wedge
Topic: 14476 Message: 14506

Hi, Dave -

It's the PTO bearing itself that gets lubed: the centre of the shaft that's moving the slug in the PTO coil. The gear at the other side of that bearing is brass or bronze on all the radios.

No other lube was ever necessary with any of the Nylon gears. It's the ball bearings on the back side that get lubed.

HTH - 73 -

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: w6mqi
Sent: Thursday, June 27, 2013 10:32 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Re: Grease vs oil in the PTO

If the gears are nylon I wouldn't think that any type of lube would be needed. Delrin is much harder then nylon and a little silicon based grease probably wouldn't hurt. Here's a product that some printer repair shops use http://www.fuchs.com/fuchs_chemplex.php Chemplex 710. The gears on my R4C are dry no lube at all and the PTO spins fairly easily, The T4XC is another story someone in the past put some sort of grease on the gears and now even after a complete over haul I still can't get a smooth running PTO. So I would just clean the gears with soap and water and reassemble dry and hope for the best that the gears haven't swelled up from improper use of grease.
Gotta love that B-line the PTO's on these are smooth as silk!

73,Dave
W6MQI

--- In DrakeRadio@yahoogroups.com, "Steve Wedge" <w1es1982@...> wrote:
>
> Some observations I've been making suggest that it's probably better to use grease in the PTO bearings and not light oil.
>
> All of the really "mint" or near-mint rigs I've seen lately have no contaminants on the Nylon gears. All of these PTO's still have grease visible around the bearings.
>
> All of the sets I've seen with oily Nylon gears have very little grease on these bearings but do have signs of oil.
>
> Since petroleum oil is known to distort Nylon over time, I'm forming a hypothesis that at

least some Nylon gear deforming issues came from a well-intentioned owner or repair person applying oil to the bearings. The oil inevitably leaks out the front and dribbles down the pinion gear, where it then transfers to oil to the Nylon gear.
>
> Perhaps Bill Frost would know the answer to this as far as what was used at the factory (including the type of grease). That R-4 I had and several other sets in excellent condition still had grease in place (and it was not congealed). Those sets, I've merely added a small amount of grease to. I know from now on, when I need to clean out dried grease, I'll be taking the whole thing apart and using grease on reassembly. It also will help with keeping those pesky ball bearings in place during reassembly!
>
> 73,
>
> Steve Wedge, W1ES/4
>
> Time flies like an arrow; fruit flies like a banana.
>
>
> All my computers have my signature with various pearls of wisdom appended thereto.
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

14507. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 01:46:38 UTC
From: GALE STEWARD
Topic: 14464 Message: 14507

To save your L4 AC switches, I think the mod explained in the following link is a better way to go.

http://www.w8zr.net/vintage/amplifiers/Drake%20L4B%20Modification/Drake%20L-4B%20Modification.htm

I have built and installed this in one of my L4 amps. Works great...

73, Stew K3ND

From: Don Cunningham <donc@...>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, June 27, 2013 7:03 PM
Subject: Re: [DrakeRadio] L-4B Softstart

Okay, Paul, I'm ready for a good design like that. I have some switch repair kits I bought recently, but after looking at them, I'd just as soon not have to use them!!!!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

[Non-text portions of this message have been removed]

Yahoo! Groups Links

[Non-text portions of this message have been removed]

14508. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 01:47:11 UTC
From: Garey Barrell
Topic: 14492 Message: 14508

I'll have to look up the alloy they came up with after the War for tube plates.

EIMAC had advertising tothe effect that the new metal had the gettering capabilities of tantalum, without the expense.

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
>> I have two guys that repair amps and they keep telling me
>> the people who do not run their 3-500z tubes at full output
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>> I argued with him but he insists that 3-500z unlike
>> ceramic tubes, were ment to be run al full drive and full
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>>
>> Thanks for the feedback.
>>
>> Gary K4MT
> I think this may be the belief that the plates must run
> very hot for the gettering action to function. It may have
> been true of the tantalum plates used in the 1930s and 1940s
> but not the type which has been used since. Glass tubes do
> tend to become gassy durring long storage but that is due to
> leakage around the seals. Ceramic tubes last forever. I
> think Eimac has data somewhere about tube ratings and life.
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> its limit all the time would do anything but shorten its

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> damaged by excessive heat, is the emission of the cathode.
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> other problem is heating of the grids from excessive
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> they can sag or warp. Another problem is inadequate cooling
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> service so the ratings are rather lower.
> I wonder if your RF engineer friend can give you some
> sort of citation about this. I could be wrong but my opinion
> is based on reading engineering recommendations from Eimac
> and RCA.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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14509. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 21:17:25 UTC
From: Garey Barrell
Topic: 14492 Message: 14509

Gary -

This is true. Running these tube at full power heats up the plates and causes them to 'getter' (gather and adsorb) gas molecules keeping a
hard vacuum and reducing if not eliminating Grid emission.

Failures are caused by too much Grid current, too little air on the glass-metal seals, and sockets with poor tension. Weak sockets result
in excess heating, sometimes enough to melt the solder out of the pin, which is a 'runaway' condition. As the solder crystallizes, the
resistance increases, the pin heats, the glass metal seal can no longer be kept cool and things just spiral out of control.

PreWW-II, EIMAC tubes had a reputation for longevity among those who ran them full bore with red hot plates. At that time the plates were
made of tantalum and acted as excellent getters. Those who 'babied' them complained that they had a short working life!

Tantalum plates were discontinued because of cost, but an alloy was designed by EIMAC to give a similar effect.

Running at reduced power also results in higher Grid current, which is one of the ways power tubes are destroyed. When you have your
amplifier tuned properly and Grid current where it should be, reduce the LOAD control and watch the Grid current rise!

There is a lot of good information on the W8JI.com site about amplifiers, tubes, and their foibles....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
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<www.k4oah.com>

k4mt wrote:
> I have two guys that repair amps and they keep telling me the people who do not run their 3-500z tubes at full output and throttle them back have a much higher tube failure rate than those who run them full output wide open all the time. I can see no literature that supports this claim but they insist that it is true. They are old time tube amp guys, one who was a RF engineer on high power transmitting equipment.
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> I argued with him but he insists that 3-500z unlike ceramic tubes, were ment to be run al full drive and full output. This makes no sense to me.
>
> Thanks for the feedback.

>
> Gary K4MT
>
>

14510. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 01:55:27 UTC
From: Garey Barrell
Topic: 14492 Message: 14510

Came to me..... Zirconium is the material I was trying to recall. Initially it was alloyed into the metal anode, but later and I believe
up until the end, was coated on the outside of the Plate. It must be heated to at least dull red to work, again giving rise to the
longevity of the tube being related to how hard it's pushed!

So Platesred, glass/metal seals cooled, recommended Grid current, slightly low (4.9 VAC) filament voltage.

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
>> I have two guys that repair amps and they keep telling me
>> the people who do not run their 3-500z tubes at full output
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>> output. This makes no sense to me.
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> I think this may be the belief that the plates must run
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> but not the type which has been used since. Glass tubes do
> tend to become gassy durring long storage but that is due to

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> I wonder if your RF engineer friend can give you some
> sort of citation about this. I could be wrong but my opinion
> is based on reading engineering recommendations from Eimac
> and RCA.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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14511. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 02:25:06 UTC
From: amfone
Topic: 14492 Message: 14511

Eimac as I recall noted a 3-500Z's life would be 20,000 hours, but that has so many variables.

The tubes should run warm, very warm orange like to work effectively but I have used a pair in my L7, original tubes since 1979 mostly in the low tap CW position running 500 watts using the SSB mode and they are still good tubes. I also use the amp with a Orion running about 100 watts of carrier in the AM mode, which equals 400 watts peak power in the low tap position as well, no issues. Some guys really want to drive the tube and its a rugged transmitting tube for the service we use in Amateur radio, however I see no need from a practical standpoint to try to drive the amp fully regarding the insignificant signal increase and the life of the tube. I know you can run the 3-500Z at lower power levels with no issues as noted, but when running at about 1750V keep an eye on the grid current, lower voltage will result in higher levels of grid current, higher voltages will result in lower grid current. I belive the grid current on a 3-500Z should not run
over 160 mils and should work well at 80 to 100 mils.

73 Tim
WB8UHZ

From: Garey Barrell <k4oah@...>
To: DrakeRadio@yahoogroups.com
Sent: Thursday, June 27, 2013 9:47 PM
Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

I'll have to look up the alloy they came up with after the War for tube plates.

EIMAC had advertising tothe effect that the new metal had the gettering capabilities of tantalum, without the expense.

73, Garey - K4OAH
Glen Allen, VA

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and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
>> I have two guys that repair amps and they keep telling me

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> and RCA.
>
>
> --
> Richard Knoppow
> LosAngeles
> WB6KBL
> dickburk@...
>
>
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[Non-text portions of this message have been removed]

14512. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 02:30:32 UTC
From: Don Cunningham
Topic: 14464 Message: 14512

Stew,

Thanks for posting that. I KNEW I had seen that before, and had forgotten that it was on Jim Garland's site!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

[Non-text portions of this message have been removed]

14513. looking for a SW-4A RECEIVER

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 14:30:46 UTC
From: yash@aol.com
Topic: 14513 Message: 14513

would like to fine a decent SW-4A receiver, cosmetics not important.
73
dale wt4t

[Non-text portions of this message have been removed]

14514. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 03:22:07 UTC
From: Abqcooks@...
Topic: 14492 Message: 14514

For decades I have heard it said that letting the Eimac 3-500Z tubes develop some anode color once in a while
would prolong their life by gettering. Makes good sense so I have done that with my Eimac tubes.
But what about the newer graphite anode 3-500ZG tubes ? I called RF Parts (who market those Chinese tubes)
and the techs there have no idea whether there is gettering on the graphite anodes or not !
So not sure if anode color does them any good.

As for the thread on soft start for the L-4B .... Ameritron makes a soft start for $80 that eliminates the need to
do any mods to the classic amp and also eliminates the need to toggle the fragile L-4B power switch at all.
check out the Ameritron ICP-240 gl Jim

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Thu, Jun 27, 2013 8:16 pm
Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Came to me..... Zirconium is the material I was trying to recall. Initially it
was alloyed into the metal anode, but later and I believe
up until the end, was coated on the outside of the Plate. It must be heated to
at least dull red to work, again giving rise to the
longevity of the tube being related to how hard it's pushed!

So Platesred, glass/metal seals cooled, recommended Grid current, slightly low
(4.9 VAC) filament voltage.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Richard Knoppow wrote:
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
>> I have two guys that repair amps and they keep telling me

>> the people who do not run their 3-500z tubes at full output
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> and RCA.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>
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Yahoo! Groups Links

[Non-text portions of this message have been removed]

14515. RE: Dan's Location

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 19:57:32 UTC
From: Don Cunningham
Topic: 14515 Message: 14515

Oops, sorry all. That was meant privately to Dan. My old brain forgot this list is set to go to all. Old people are dangerous!!!!!!
73,
Don, WB5HAK

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13

14516. 4-NB Setup Procedures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 22:25:10 UTC
From: Steve Wedge
Topic: 14516 Message: 14516

Garey, the procedure on your CD is much less ambiguous than the one I have that came with the NB.

Lacking a VTVM and heeding your advice, I hooked a scope probe to R45 and had no difficulty at all in making sure the unit was adjusted (actually, it was pretty much dead-nutz on out of the box).

I'm about ready to put the covers back on! Yippee!

73,

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

[Non-text portions of this message have been removed]

14517. Re: [DrakeRadio] 4-NB Setup Procedures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 13:45:49 UTC
From: Garey Barrell
Topic: 14516 Message: 14517

Steve -

Cool. The only tricky point is if you go past that null, it's pretty sharp! The scope makes it easier still since you don't have to get a
needle inmotion! Jeff told me oncethat almost every one he saw was misadjusted, and my experience has been just the opposite..... Of
course he's seen LOTS more than I have..

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
> Garey, the procedure on your CD is much less ambiguous than the one I have that came with the NB.
>
> Lacking a VTVM and heeding your advice, I hooked a scope probe to R45 and had no difficulty at all in making sure the unit was adjusted (actually, it was pretty much dead-nutz on out of the box).
>
> I'm about ready to put the covers back on! Yippee!
>

14518. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 13:48:09 UTC
From: Garey Barrell
Topic: 14464 Message: 14518

The 'really' neat thing about that approach is that most all those 'relays' only switch the power on at a 'zero crossing' point.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Don Cunningham wrote:
> Stew,
>
> Thanks for posting that. I KNEW I had seen that before, and had forgotten that it was on Jim Garland's site!!!!
> 73,
> Don, WB5HAK
>

14519. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 14:07:22 UTC
From: Garey Barrell
Topic: 14492 Message: 14519

Jim -

I have no realinformation on the 'ZG tubes, but the Zirconium coating is described as imparting a dull, flat gray surface to the graphite plate.

The data sheet for the 3-500Z 'states' that thetube is intended to run with the anode a "visibly red" color.

By the way, thereis NO reference to 'instant on' regarding filament power. The only caveat is to limit inrush current to a cold filament to
twice the operating current (nominally 14.6A) to minimize mechanical stresses on the filament structure. I suspect that the transformer
winding and filament choke resistance will take care of that in the L-4B, but I don't know that for a fact. Another reason for my 'slow'
start!!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Abqcooks@... wrote:
> For decades I have heard it said that letting the Eimac 3-500Z tubes develop some anode color once in a while
> would prolong their life by gettering. Makes good sense so I have done that with my Eimac tubes.
> But what about the newer graphite anode 3-500ZG tubes ? I called RF Parts (who market those Chinese tubes)
> and the techs there have no idea whether there is gettering on the graphite anodes or not !
> So not sure if anode color does them any good.
>
> As for the thread on soft start for the L-4B .... Ameritron makes a soft start for $80 that eliminates the need to
> do any mods to the classic amp and also eliminates the need to toggle the fragile L-4B power switch at all.
> check out the Ameritron ICP-240 gl Jim
>
>
>
>
>
>
> -----Original Message-----

> From: Garey Barrell <k4oah@...>
> To: DrakeRadio <DrakeRadio@yahoogroups.com>
> Sent: Thu, Jun 27, 2013 8:16 pm
> Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power
>
>
> Came to me..... Zirconium is the material I was trying to recall. Initially it
> was alloyed into the metal anode, but later and I believe
> up until the end, was coated on the outside of the Plate. It must be heated to
> at least dull red to work, again giving rise to the
> longevity of the tube being related to how hard it's pushed!
>
> So Platesred, glass/metal seals cooled, recommended Grid current, slightly low
> (4.9 VAC) filament voltage.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> Richard Knoppow wrote:
>> ----- Original Message -----
>> From: "k4mt" <k4mt@...>
>> To: <DrakeRadio@yahoogroups.com>
>> Sent: Thursday, June 27, 2013 1:51 PM
>> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
>> Power
>>
>>
>>> I have two guys that repair amps and they keep telling me
>>> the people who do not run their 3-500z tubes at full output
>>> and throttle them back have a much higher tube failure rate
>>> than those who run them full output wide open all the time.
>>> I can see no literature that supports this claim but they
>>> insist that it is true. They are old time tube amp guys,
>>> one who was a RF engineer on high power transmitting
>>> equipment.
>>>
>>> I argued with him but he insists that 3-500z unlike
>>> ceramic tubes, were ment to be run al full drive and full
>>> output. This makes no sense to me.
>>>
>>> Thanks for the feedback.
>>>
>>> Gary K4MT
>> I think this may be the belief that the plates must run
>> very hot for the gettering action to function. It may have
>> been true of the tantalum plates used in the 1930s and 1940s

>> but not the type which has been used since. Glass tubes do
>> tend to become gassy durring long storage but that is due to
>> leakage around the seals. Ceramic tubes last forever. I
>> think Eimac has data somewhere about tube ratings and life.
>> Worth looking for. I can't see that pushing a tube right to
>> its limit all the time would do anything but shorten its
>> life. The main limit on life of a tube, assuming its not
>> damaged by excessive heat, is the emission of the cathode.
>> Excessive output will tend to shorten cathode life. The
>> other problem is heating of the grids from excessive
>> secondary emission or dissipation. If they get hot enough
>> they can sag or warp. Another problem is inadequate cooling
>> of the seals which will eventually cause leaks. There is a
>> reason for two sets of ratings on many tubes, the CCS and
>> ICAS. Generally, CCS ratings result in longer life. ICAS is
>> given for reasons of economy where the tube is not going to
>> be run hard for very long at a time. CCS is for _continuous_
>> service so the ratings are rather lower.
>> I wonder if your RF engineer friend can give you some
>> sort of citation about this. I could be wrong but my opinion
>> is based on reading engineering recommendations from Eimac
>> and RCA.
>>
>>
>> --
>> Richard Knoppow
>> Los Angeles
>> WB6KBL
>> dickburk@...
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>> Yahoo! Groups Links
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> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14520. Re: [DrakeRadio] 4-NB Setup Procedures

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 14:15:22 UTC
From: Steve Wedge
Topic: 14516 Message: 14520

I had an excellent General Radio, I think the model was 1856, VTVM before I moved to NC. I sold much of my test equipment before I moved as a lot of it was kind of old and bulky. I've since picked up a few things as I've needed them and have considered the Elecraft generator - except that it won't do 50 KHz.

The setup of the NB was quite simple, except there's no Brown/white wire. Knowing that the Calibrator gets turned on by grounding it, I metered the pins and played with the switch . I just couldn't remember which pin was pin 2 on that connector.

Steve Wedge, W1ES/4

Time flies like an arrow; fruit flies like a banana.

All my computers have my signature with various pearls of wisdom appended thereto.

From: Garey Barrell
Sent: Friday, June 28, 2013 9:45 AM
To: DrakeRadio@yahoogroups.com
Subject: Re: [DrakeRadio] 4-NB Setup Procedures

Steve -

Cool. The only tricky point is if you go past that null, it's pretty sharp! The scope makes it easier still since you don't have to get a
needle inmotion! Jeff told me oncethat almost every one he saw was misadjusted, and my experience has been just the opposite..... Of
course he's seen LOTS more than I have..

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

Steve Wedge wrote:
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>
> Lacking a VTVM and heeding your advice, I hooked a scope probe to R45 and had no difficulty at all in making sure the unit was adjusted (actually, it was pretty much dead-nutz on out of the box).
>
> I'm about ready to put the covers back on! Yippee!
>

[Non-text portions of this message have been removed]

14521. Re: [DrakeRadio] Re: TR7 synthesizer problem

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 15:35:56 UTC
From: Garey Barrell
Topic: 14370 Message: 14521

Fritz -

Sure been quiet!?!?! Inquiring minds want to know.....

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

k6echoecho wrote:
> Garey,
>
> Thanks so much for these hints! Will check these points and report back. 73 Fritz
>
> --- In DrakeRadio@yahoogroups.com, Garey Barrell <k4oah@...> wrote:
>> Fritz -
>>
>> Unlocked synthesizer. Check the +24 VDC supply.
>>
>> If low or missing, check the DC-DC converter transformer to make sure both halves of the "E" core are tightly together and the wire loop is
>> in place around it.
>>
>> 73, Garey - K4OAH
>> Glen Allen, VA
>>
>> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
>> and TR-4/C Service Supplement CDs
>> <www.k4oah.com>
>>
>> k6echoecho wrote:
>>> I am just setting up my shack with my TR7, after a few years of not being on the air with this rig.
>>> After two years of not using my TR7, it has developed a synthesizer problem, roughly similar as described in an older threat between N8YX and WB2WIK (see below).
>>>
>>> My synthesizer error is somewhat more specific as the one described in the N8YX-WB2WIK threat:
>>>
>>> If the unit is powered on, the synthesizer sometimes in a reproducible fashion does not follow the band switch but rather ignores band switching.
>>> Observations:
>>> 1) It usually switches fine from 21 to 14 to 7 to 3.5.
>>>

>>> 2) There is hysteresis in how the synthesizer follows the band switching:
>>> To switch to 21 one usually has to overshoot with the band switch to 28. To switch to 3.5 one has to overshoot to 1.5 with the band switch
>>>
>>> 3) When powered on, the synthesizer never switches to 1.8 or 28.
>>>
>>> 4) The synthesizer sets ALWAYS correctly to any band set by the band switch (also 28 or 1.5!) after switching the transceiver off and on again.
>>>
>>> I followed N8YXes instructions (below), removed DR7 and Digital Control unit, cleaned it and treated everything with DeOxit.
>>> I did not resolder as suggested by N8YX, however, the soldering contacts seem fine and my error persists consistently.
>>> Of course, I also wiggled all the switches that WB2WIK, again the switches seem solid and the problem did not change.
>>>
>>>
>>> Anyone has a recommendation where I could search for a problem next?
>>>
>>> Thanks a lot!
>>>
>>> vy 73 de
>>>
>>> Fritz, K6EE
>>>
>>>
>>>
>>> ---
>>> N8YX
>>> 02-18-2009, 01:38 PM
>>> 1) Obtain the TR7 service manual
>>> 2) Obtain a bottle of DeOxIt
>>> 3) If you don't already have one, obtain a board puller or fashion one
>>> yourself
>>> 4) Remove wraparound case - 8 screws on bottom of radio
>>> 5) Locate DR7 readout board. Carefully remove the DR7 board, following
>>> the procedure in the service manual. Be sure to note where the various
>>> 5 and 6-pin connectors - along with the 1st mixer and band-select wire
>>> (blue) go
>>> 6) Note the large Molex connectors (.156" spacing). Gently re-solder each of the pins from the top side of the DR7 then apply DeOxIt to each of the pins and their mating receptacles. Follow Caig's directions when doing this. Repeat until all oxidation is removed.
>>> 7) Install the DR7 into the rig, ensuring that all Molex connectors engage properly. It's tricky at first...but if you've done a gazillion of them it's not that big of a deal.
>>> 8) Replace all connectors and wires that you removed in Step 5. Then test rig.
>>>
>>> What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will

get your radio working correctly again.
>>> WB2WIK
>>> 02-18-2009, 03:59 PM
>>> 1) Obtain the TR7 service manual
>>> 2) Obtain a bottle of DeOxIt
>>> 3) If you don't already have one, obtain a board puller or fashion one
>>> yourself
>>> 4) Remove wraparound case - 8 screws on bottom of radio
>>> 5) Locate DR7 readout board. Carefully remove the DR7 board, following
>>> the procedure in the service manual. Be sure to note where the various
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>>>
>>> What's happening is that one or more of the pins in the Molex connectors on the bandswitch logic (leftmost) side of the board has become intermittent (via questionable solder connection) or is simply dirty due to oxidation. The procedure described above will get your radio working correctly again.
>>>
>>> ::Good advice, albeit a fairly complex procedure (mostly removing the cover and unseating all the blind-mate connectors under the DR7 board, which takes a knack).
>>>
>>> Before even doing that, you might try rocking these switches:
>>>
>>> Bandswitch (front panel)
>>> Auxiliary Program switch (front panel) Frequency counter switch (slide
>>> switch, EXT/NORM on rear panel)
>>>
>>> If any of those are making crappy contact the frequency counter can act weirdly, as they all have an input to the counter itself.
>>>
>>> WB2WIK/6
>>>
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> Yahoo! Groups Links
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14522. Ameritron ICP-240 is not a soft start?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 15:37:05 UTC
From: K9sqg
Topic: 14492 Message: 14522

I use an Ameritron ICP-240 as an external switch to save the originals on my L4B and L7 amps. While I don't care to comment on that switch as a transient suppressor, I can say with confidence that it is not a soft start circuit in functional, practical sense of the term. Why?

The design of the ICP-240, at least the ones I bought 2-3 years ago, are such that the relay closure time is determined by the first time the input sine wave reaches a particular value. With a 60 hz source, a single AC cycle is approximately 17 milliseconds. So sometime within about a half cycle (depending on phase) that results in about an 8.5 millisecond delay. Then you have the pull in time of the armature of the relay which is another small delay. Needless to say, the tube filaments have not warmed up and the HV capacitors have not had enough AC cycles to fully charge either. Hence, while there is some very, very slight delay, it is not enough to have a practical, functional effect on the onset surge. So in a very strict interpretation of the term, there is a small delay and that might keep the device from falling into the category of false advertising.

I called Ameritron (MFJ) a couple of years or so ago and the knowledgeable gentlemen I talked with confirmed that my analysis was correct. To my knowledge, there has been no change to the design nor advertising. If I am incorrect, I'd like to know about it.

Please note that my reason for buying the ICP-240 was just to use it as an external switch for my amplifiers and for that purpose it satisfies my needs. As a soft start, not so much. Too, if one wants to rebuild the switch assembly on the L4, L4B, and L7, it isn't all that difficult due to the rebuild kit available online. With this approach, you might just get yet another 30-40 years out of the amp's switch.

Enjoy those Drakes.

73,

Evan, K9SQG

-----Original Message-----
From: Abqcooks <Abqcooks@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Fri, Jun 28, 2013 3:55 am
Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

For decades I have heard it said that letting the Eimac 3-500Z tubes develop some anode color once in a while
would prolong their life by gettering. Makes good sense so I have done that with my Eimac tubes.
But what about the newer graphite anode 3-500ZG tubes ? I called RF Parts (who market those Chinese tubes)
and the techs there have no idea whether there is gettering on the graphite anodes or not !
So not sure if anode color does them any good.

As for the thread on soft start for the L-4B .... Ameritron makes a soft start for $80 that eliminates the need to
do any mods to the classic amp and also eliminates the need to toggle the fragile L-4B power switch at all.
check out the Ameritron ICP-240 gl Jim

-----Original Message-----
From: Garey Barrell <k4oah@...>
To: DrakeRadio <DrakeRadio@yahoogroups.com>
Sent: Thu, Jun 27, 2013 8:16 pm
Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Came to me..... Zirconium is the material I was trying to recall. Initially it
was alloyed into the metal anode, but later and I believe
up until the end, was coated on the outside of the Plate. It must be heated to
at least dull red to work, again giving rise to the
longevity of the tube being related to how hard it's pushed!

So Platesred, glass/metal seals cooled, recommended Grid current, slightly low
(4.9 VAC) filament voltage.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>;

Richard Knoppow wrote:
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
>> I have two guys that repair amps and they keep telling me
>> the people who do not run their 3-500z tubes at full output
>> and throttle them back have a much higher tube failure rate
>> than those who run them full output wide open all the time.
>> I can see no literature that supports this claim but they
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>> equipment.
>>
>> I argued with him but he insists that 3-500z unlike
>> ceramic tubes, were ment to be run al full drive and full
>> output. This makes no sense to me.
>>
>> Thanks for the feedback.
>>
>> Gary K4MT

> I think this may be the belief that the plates must run
> very hot for the gettering action to function. It may have
> been true of the tantalum plates used in the 1930s and 1940s
> but not the type which has been used since. Glass tubes do
> tend to become gassy durring long storage but that is due to
> leakage around the seals. Ceramic tubes last forever. I
> think Eimac has data somewhere about tube ratings and life.
> Worth looking for. I can't see that pushing a tube right to
> its limit all the time would do anything but shorten its
> life. The main limit on life of a tube, assuming its not
> damaged by excessive heat, is the emission of the cathode.
> Excessive output will tend to shorten cathode life. The
> other problem is heating of the grids from excessive
> secondary emission or dissipation. If they get hot enough
> they can sag or warp. Another problem is inadequate cooling
> of the seals which will eventually cause leaks. There is a
> reason for two sets of ratings on many tubes, the CCS and
> ICAS. Generally, CCS ratings result in longer life. ICAS is
> given for reasons of economy where the tube is not going to
> be run hard for very long at a time. CCS is for _continuous_
> service so the ratings are rather lower.
> I wonder if your RF engineer friend can give you some
> sort of citation about this. I could be wrong but my opinion
> is based on reading engineering recommendations from Eimac
> and RCA.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
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Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

14523. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 02:38:31 UTC
From: Richard Knoppow
Topic: 14492 Message: 14523

----- Original Message -----
From: "Garey Barrell" <k4oah@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 6:47 PM
Subject: Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

> I'll have to look up the alloy they came up with after the
> War for tube plates.
>
> EIMAC had advertising tothe effect that the new metal had
> the gettering capabilities of tantalum, without the
> expense.
>
> 73, Garey - K4OAH
> Glen Allen, VA

Eimac called it Pyrovac. It was introduced sometime around 1946. I don't think it was an alloy so much as a combination of coatings on some standard material like nickel. One of the components of the coating is zirconium but other materials are also used. Tantalum was expensive but I think the real reason for switching is that it didn't work that well. Tantalum plates seem to have originated with Heintz & Kaufmann. Both Bill Eitel and Jack McCollugh worked for them. If you look up patents for William Eitel you will find a slew assigned to H&K. One of Eimac's secrets was a type of diffusion vacuum pump they devised that allowed tubes to be pumped out better. The processing of the tube causes a lot of gas to be evolved and it must be removed. The tubes were kept connected to a vacuum pump while being brought to very high heat by RF induction heating. As much gas as possible was removed before sealing off and whatever remained had to be cleaned up by the getter. Some getters work only when hot, some only when there is voltage on the tube, and some continue to work in cold tubes to maintain the vacuum during storage or off times. Coatings on the elements are used in all tubes but the familiar silver coating from sprayed getter is not used on larger transmitting tubes. In general transmitting tubes are pumped down to a greater vacuum than receiving tubes (how do you say increasingly small).

--
Richard Knoppow
Los Angeles

WB6KBL
dickburk@...

14524. Re: [DrakeRadio] L-4B Softstart

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-28 00:17:50 UTC
From: Paul Kraemer
Topic: 14464 Message: 14524

I'll have to look at the schematic of the control circuit to see if what I have will adapt readily as parts wired to a terminal strip.
Of course, nothing wrong with making another circuit board kit either to keep the ES4AC-4PS company
The relays just look "perfect size" for this application. I need to design something to use them
I think the power switch should just switch control voltage and leave the big current in the supply.
I'm doing the same change to my LK-550ZC but there is an abundance of space in that supply. Easy to find parts to fit that one.
I'll take a look see at the L4-PS.
Paul K0UYA
----- Original Message -----
From: "Don Cunningham" <donc@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 6:03 PM
Subject: Re: [DrakeRadio] L-4B Softstart

> Okay, Paul, I'm ready for a good design like that. I have some switch
> repair kits I bought recently, but after looking at them, I'd just as soon
> not have to use them!!!!!!!
> 73,
> Don, WB5HAK
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.3345 / Virus Database: 3204/6445 - Release Date: 06/27/13
>
>
> [Non-text portions of this message have been removed]
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> Yahoo! Groups Links
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14525. RE: [DrakeRadio] Drake repair in or around Los Angeles?

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 20:04:53 UTC
From: Terrell Hamilton
Topic: 14488 Message: 14525

Bill:

Here are a couple of westcoast guys that might save you some shipping money. Their names were passed on to me a couple of years ago - The comments are from the people who recommended them

73 -

Terry K7WLD

Wenatchee, WA

1. George Runyan, WB6YEC 619-277-6043. Great guy, outstanding work, in San Diego area and active on AM and vintage SSB nets.

2. I used this guy in the Portland area to repair my R-4 & T-4 rigs, he did an EXCELLENT job, he is slow but he is good!

Borsch (Joe) Electronics

9935 SW Johnson St.

Tigard Or. 97223-5222

503-684-5401

From: DrakeRadio@yahoogroups.com [mailto:DrakeRadio@yahoogroups.com] On Behalf Of billykatzz
Sent: Thursday, June 27, 2013 10:51 AM
To: DrakeRadio@yahoogroups.com
Subject: [DrakeRadio] Drake repair in or around Los Angeles?

I have a set of B-Twins and the AC4 power supply I've been meaning to ship to Jeff Covelli for service. Only thing is: the shipping out and back is going to cost about $200.

Nothing against Jeff, he's the best, but are there any other service or repair guys around here in So Cal, specifically the Los Angeles area, that are knowledgeable about Drakes?

Thanks, guys!

Bill, NK6Q
Pasadena

[Non-text portions of this message have been removed]

14526. Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-27 23:18:12 UTC
From: k4mt
Topic: 14492 Message: 14526

This has been very interesting reading. I talked to him a while ago and his argument is really based on observation, not science.

He claims he has to change rather low hour 3-500z tubes with the same story from the owner who is in disbelief that they failed because they never ran the amp over 600 watts. On the flip side he claims people who are net controls and rag chewers every day and run a full 100 watts drive and tune for max smoke, get much longer life and brag to him how many years they ran the tar out of those tubes. Go Figure! He does and has worked on high power amps for a long time so has a lot of historical data.

I think I will not worry and run my tubes conservatively as $300 plus is a lot of change right now and my current tubes are healthy and do more power in the L-4B than is expected if driven with more than 80 watts with low grid current readings.

Thanks All,

Gary K4MT

--- In DrakeRadio@yahoogroups.com, "Richard Knoppow" <1oldlens1@...> wrote:
>
>
> ----- Original Message -----
> From: "k4mt" <k4mt@...>
> To: <DrakeRadio@yahoogroups.com>
> Sent: Thursday, June 27, 2013 1:51 PM
> Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low
> Power
>
>
> >I have two guys that repair amps and they keep telling me
> >the people who do not run their 3-500z tubes at full output
> >and throttle them back have a much higher tube failure rate
> >than those who run them full output wide open all the time.
> >I can see no literature that supports this claim but they
> >insist that it is true. They are old time tube amp guys,
> >one who was a RF engineer on high power transmitting
> >equipment.
> >
> > I argued with him but he insists that 3-500z unlike
> > ceramic tubes, were ment to be run al full drive and full
> > output. This makes no sense to me.
> >
> > Thanks for the feedback.
> >
> > Gary K4MT
>

> I think this may be the belief that the plates must run
> very hot for the gettering action to function. It may have
> been true of the tantalum plates used in the 1930s and 1940s
> but not the type which has been used since. Glass tubes do
> tend to become gassy durring long storage but that is due to
> leakage around the seals. Ceramic tubes last forever. I
> think Eimac has data somewhere about tube ratings and life.
> Worth looking for. I can't see that pushing a tube right to
> its limit all the time would do anything but shorten its
> life. The main limit on life of a tube, assuming its not
> damaged by excessive heat, is the emission of the cathode.
> Excessive output will tend to shorten cathode life. The
> other problem is heating of the grids from excessive
> secondary emission or dissipation. If they get hot enough
> they can sag or warp. Another problem is inadequate cooling
> of the seals which will eventually cause leaks. There is a
> reason for two sets of ratings on many tubes, the CCS and
> ICAS. Generally, CCS ratings result in longer life. ICAS is
> given for reasons of economy where the tube is not going to
> be run hard for very long at a time. CCS is for _continuous_
> service so the ratings are rather lower.
> I wonder if your RF engineer friend can give you some
> sort of citation about this. I could be wrong but my opinion
> is based on reading engineering recommendations from Eimac
> and RCA.
>
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickburk@...
>

14527. Re: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-29 17:40:48 UTC
From: Richard Knoppow
Topic: 14492 Message: 14527

----- Original Message -----
From: "k4mt" <k4mt@...>
To: <DrakeRadio@yahoogroups.com>
Sent: Thursday, June 27, 2013 4:18 PM
Subject: [DrakeRadio] Re: L-4B Tube life Full power or Low Power

> This has been very interesting reading. I talked to him a
> while ago and his argument is really based on
> observation, not science.
>
> He claims he has to change rather low hour 3-500z tubes
> with the same story from the owner who is in disbelief
> that they failed because they never ran the amp over 600
> watts. On the flip side he claims people who are net
> controls and rag chewers every day and run a full 100
> watts drive and tune for max smoke, get much longer life
> and brag to him how many years they ran the tar out of
> those tubes. Go Figure! He does and has worked on high
> power amps for a long time so has a lot of historical
> data.
>
> I think I will not worry and run my tubes conservatively
> as $300 plus is a lot of change right now and my current
> tubes are healthy and do more power in the L-4B than is
> expected if driven with more than 80 watts with low grid
> current readings.
>
>
> Thanks All,
>
> Gary K4MT

It would be interesting to know the failure mode of the
short life tubes, do they get gassy or is it something else.
Low cathode emission could be a sign of gas because gas can
"poison" the cathode. I have not seen anything showing the
absorption rate of getter coating on plates vs: temperature.
I am sure such information exists but its not in any of the
material I have access to. Tantalum seems to need high
temperatures but I don't know about other materials like
zirconium. Someone wrote that Eimac recommends that the
triodes used by Drake be run with the plates showing some
color.
I think its interesting that external anode tubes do

not seem to have this problem (if it is a problem) but they
use different gettering means.

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@...

14528. Problem with NB and Cal Positions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 06:48:24 UTC
From: rdl014
Topic: 14528 Message: 14528

I have recently acquired another Drake R-4B receiver that appears to be in good shape and receives with no problems. My concern is with the Function knob. When I turn the knob to STBY the S meter needles swings over to the max position as it should and no sound. When I move it to ON, I get sound now that I have made and added a shorting RCA plug for the mute plug and the S meter needle moves appropriately. In all other positions: EXT MUTE, NB AND CAL positions, the S meter needle again moves over the max position and I get no sound at all.

Anyone have this problem before and any suggestions as to where I need to start checking?
TNX and 73, Ray AK4RL

14529. Re: [DrakeRadio] Problem with NB and Cal Positions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 07:13:05 UTC
From: Mike Millen
Topic: 14528 Message: 14529

You need a shorting plug in the "MUTE" socket on the rear panel.

73,
Mike
M0MLM

----- Original Message -----
From: rdl014
To: DrakeRadio@yahoogroups.com
Sent: Sunday, June 30, 2013 7:48 AM
Subject: [DrakeRadio] Problem with NB and Cal Positions

I have recently acquired another Drake R-4B receiver that appears to be in good shape and receives with no problems. My concern is with the Function knob. When I turn the knob to STBY the S meter needles swings over to the max position as it should and no sound. When I move it to ON, I get sound now that I have made and added a shorting RCA plug for the mute plug and the S meter needle moves appropriately. In all other positions: EXT MUTE, NB AND CAL positions, the S meter needle again moves over the max position and I get no sound at all.

Anyone have this problem before and any suggestions as to where I need to start checking?
TNX and 73, Ray AK4RL

[Non-text portions of this message have been removed]

14530. Re: [DrakeRadio] Problem with NB and Cal Positions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 14:02:59 UTC
From: Garey Barrell
Topic: 14528 Message: 14530

Ray -

If you plugged your 'shorted' RCA plug into the MUTE jack, sounds like it's not really shorted!!

If the plug IS really shorted, then the jack wiring is open.

The ON position does NOT require the shorting plug to function.

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

rdl014 wrote:
> I have recently acquired another Drake R-4B receiver that appears to be in good shape and receives with no problems. My concern is with the Function knob. When I turn the knob to STBY the S meter needles swings over to the max position as it should and no sound. When I move it to ON, I get sound now that I have made and added a shorting RCA plug for the mute plug and the S meter needle moves appropriately. In all other positions: EXT MUTE, NB AND CAL positions, the S meter needle again moves over the max position and I get no sound at all.
>
> Anyone have this problem before and any suggestions as to where I need to start checking? TNX and 73, Ray AK4RL
>
>

14531. AC-4 Power Supply with AC-4R Kit Wanted

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 16:32:23 UTC
From: w8cq
Topic: 14531 Message: 14531

Hi All,
I am looking to purchase an AC-4 power supply with the AC-4R upgrade kit installed for a Drake station I am setting up here.

Please call 567-203-9327 or email w8cq@...

Thanks,
Jeff W8CQ

14532. Re: Welcome!!

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 16:43:51 UTC
From: Garey Barrell
Topic: 14532 Message: 14532

Hi Jeff -

Welcome to the group!

73, Garey - K4OAH
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
and TR-4/C Service Supplement CDs
<www.k4oah.com>

14533. Re: [DrakeRadio] Problem with NB and Cal Positions

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 18:11:55 UTC
From: Steve Wedge
Topic: 14528 Message: 14533

Check for good contact at the shorting plug. You can tighten them back up with needle nose pliers by squeezing the central part to make it right again.

Steve Wedge, W1ES/4
Sent from my iPhone: PSE excuse any autocorrect faux pas :)

On Jun 30, 2013, at 10:02 AM, Garey Barrell <k4oah@...> wrote:

> Ray -
>
> If you plugged your 'shorted' RCA plug into the MUTE jack, sounds like it's not really shorted!!
>
> If the plug IS really shorted, then the jack wiring is open.
>
> The ON position does NOT require the shorting plug to function.
>
> 73, Garey - K4OAH
> Glen Allen, VA
>
> Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line
> and TR-4/C Service Supplement CDs
> <www.k4oah.com>
>
> rdl014 wrote:
> > I have recently acquired another Drake R-4B receiver that appears to be in good shape and receives with no problems. My concern is with the Function knob. When I turn the knob to STBY the S meter needles swings over to the max position as it should and no sound. When I move it to ON, I get sound now that I have made and added a shorting RCA plug for the mute plug and the S meter needle moves appropriately. In all other positions: EXT MUTE, NB AND CAL positions, the S meter needle again moves over the max position and I get no sound at all.
> >
> > Anyone have this problem before and any suggestions as to where I need to start checking? TNX and 73, Ray AK4RL
> >
> >
>
>

[Non-text portions of this message have been removed]

14534. AM filter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 20:38:59 UTC
From: Michael K
Topic: 14534 Message: 14534

Anyone have an AM filter for an R-4C they would consider selling? If so please contact me directly off the listserver with details.

Thank you!

Michael nz4d

Sent from Samsung tablet

[Non-text portions of this message have been removed]

14535. Re: [DrakeRadio] AM filter

Yahoo group: DrakeRadio (2013-01 — 2013-06)
Date: 2013-06-30 20:41:29 UTC
From: Edward
Topic: 14534 Message: 14535

Inrad has them

Sent from my iPhone

On Jun 30, 2013, at 13:38, Michael K <mkellync@...> wrote:

> Anyone have an AM filter for an R-4C they would consider selling? If so please contact me directly off the listserver with details.
>
> Thank you!
>
> Michael nz4d
>
>
>
>
> Sent from Samsung tablet
>
> [Non-text portions of this message have been removed]
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